Riverside Public Library Conceptual Building Program

RIVERSIDE
CALIFORNIA

CITY OF RIVERSIDE

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EXECUTIVE SUMMARY

This report was commissioned to provide a conceptual building program for the Riverside Public Library Main Library. Key findings are:

1. The model of a main library and branches is one that is used in Riverside and throughout most of the USA.
   a. A main library houses the unique and expensive print and media collections that cannot be easily duplicated in branches, and share these resources efficiently and effectively throughout the library system.
   b. The main library staff is also a system wide resource sharing economies of scope throughout the entire library system.
2. Based on Riverside City and Public Library Association standards, the size of the Main Library is inadequate to provide the programs services needed to meet Riverside's library needs.
3. The inadequate size is substantiated when the Main Library is benchmarked against similar library systems.
4. Limitations of the building's size restrict the type of programs and services offered, especially those for children and young adults.
5. Lack of space reduces the potential to have the library as a venue for educational, civic, and cultural events.
6. Based on preliminary information, the existing Main Library is structurally sound.
7. The library site meets all the criteria as a desirable location for the Main Library, and retaining the site makes economic sense.
8. In reviewing the option of demolishing the existing library building or expanding it, economics favor expansion. There is also some emotional attachment favoring expansion.
9. It is recommended that the existing building be expanded approximately 43,280 square feet to 104,700 gross square feet. A main library of this size is roughly the same size as most of the main libraries in the benchmarking set. The expansion increases the total library square footage to 157,716 square feet, and brings the square feet per capita for the library system to 0.527 at the City build out of 300,000 people.
10. Recommended action steps include:
    a. Having the City Council approve a financing plan in the summer of 2006.
    b. Issue and RFP for an architect in the summer of 2006.
    c. Select a design architect team in the fall of 2006.
    d. Create a conceptual design for the library in the fall/winter of 2007.
    e. Begin a public information campaign for the new library in the fall of 2006.
    f. Place a ballot measure before voters in the spring 0f 2007.
    g. If the ballot measure is approved, begin architectural work in the fall of 2007, and construction in 2009-2011.
    h. Move into the expanded and renovated building in the spring of 2011.

PURPOSE AND PROCEDURES FOR THE BUILDING PROGRAM

William W. Sannwald was retained by the Riverside Public Library to "Provide Consultant Services for Preliminary Planning and Building Design of the Main Library" in October of 2005. In July of 2000, Mr. Sannwald completed a *Riverside Public Library Infrastructure Study*. Many of the recommendations made in the 2000 study have been implemented by the Riverside Public Library.

First Visit to Riverside – October 4, 2005

On October 4, 2005 Mr. Sannwald met with the following people to discuss issues relating to the Main Library:

- John Schreck, President Riverside Public Library Board of Trustees

- Mike Beck, Assistant City Manager

- Brad Hudson, City Manager

- Dom Betro, City Councilman, Ward 1

- Ken Gutierrez, City of Riverside Planning Director

- Judith Auth, Library Director for the City of Riverside

- Sue Struthers, Youth Services Manager, Riverside Public Library

- Dawn Hassett (Geographics; marketing consultant and volunteer to the library on earlier ballot measures)

- Henry Coil, Tilden Coil Constructors, and Library Foundation Director

- John E. Brown, Esq.; Partner, Best, Best & Krieger, Attorney at Law and former Library Foundation Director

- Helene E. Luley Chief Librarian Riverside Public Library

- Marion Mitchell-Wilson, Fund Development Manager Riverside Public Library and former Acting State Historic Preservation Officer

While there was no general consensus on what should be done regarding a new Main Library there were a number of comments that seemed to be shared:

- The Main library should remain a downtown presence and everyone seemed to want to keep the building downtown, but not everyone wanted to keep it at the existing location

- The existing Main Library suffers from a lack of imagination, and while the structure of the building is good, it needs to present a different image

- There were differences of opinion as to whether the existing building should be demolished or expanded, but all seemed to agree that the outside of the building needed to present a different image

- Putting the Chinese Pavilion on the library site was a mistake and it should be moved to provide greater flexibility and where it could better represent the ethnic contributions to the community

- Some services and features important to the vision of the main library included:
    o Better and improved services to children
    o A high technology center
    o Some want the building demolished and a high tech building erected to replace it, and others want the library to add a facade more in keeping with its surroundings
    o Others want to respect the 1960s building, expand it, and integrate it into its surroundings, although this seemed to be a minority view.

- All seemed to agree that something needed to be done to the existing building because it is the flagship of the library system, and a significant civic statement about the importance of literacy and an informed citizenry.

2nd *Trip to Riverside – December 6, 2005*

The key meeting of the trip was the discussion with Greg Griffin, the City of Riverside's Redevelopment Area Manager in the Development Department, and the Manager's representative to the Library for Capital Projects. The discussion centered on the process and timing of the Main Library's expansion and renovation. Mr. Griffin said that an expanded Main Library is important to Riverside because it is:

- An economic development tool for the entire region but especially downtown Riverside

- An educational attractor drawing people from all over the region

- A cultural center bringing people in for a variety of cultural, recreational, and educational programs. The library's proposed 300 seat auditorium presents a venue that will be attractive to the entire community

- A center advocating a positive life-style

- A destination point for community and a source of civic pride

- Place to satisfy a variety of customer-driven needs

- A coffee shop/restaurant will enhance library use by providing a place where people can go to refresh themselves before and after using the library

Discussion with Mr. Griffin turned to the process and timing for the Main Library improvements. Mr. Griffin stated that a revised Master Plan Development of entire

downtown should include the library, and that the best alternative is to expand and renovate the Main Library on its existing site. Architecture of the expansion and renovation should honor and reflect the strength and design of the earlier Carnegie Building.

The process that Mr. Griffin suggested includes:

- Crafting an RFP based on William Sannwald's conceptual building program. Mr. Sannwald's contract may be extended to work on RFP together with Library & Development staff

- Sending the RFP out to all interested parties. It is understood that only architects from Southern California will be asked for responses

- Creating a committee of Library and Development staff to select three to five architectural firms as finalists

- Staging a public meeting for the finalists to present their firm and their previous work. This is not an architectural competition but rather a public interview

- Selecting the architectural team of choice by a Committee of Library staff/Library trustee/City staff/business/cultural interests based on submittals received and the performance of the architectural firms at the public meeting

The planned timetable for the above activities is as follows:

Time	Activity
Spring 2006	Begin Arlington and Orange Terrace construction
Summer 2006	Issue RFP (This will require City Council approval along with a financing plan)
Fall 2006	Select Design Architect Team through the process stated above
Fall 2006	Review the results of the Godbe Research which will be completed
Fall/Winter 2006-07	Work with the architectural team and Geographics to develop: • Conceptual Design for the building • Create renderings of the library. Both a "picture" of the building as well as a visually realistic computer rendering that will allow viewers to "walk through the new building" • Create marketing information and market softening materials to explain the need for the library and to explain to the public what they will get with the new building
Spring 2007	Ballot Measure to finance Main Library is approved
Summer 2007	Select a Project Management Firm
Fall 2008 to Spring 2009	Architect prepares final drawings and specifications under direction of the City of Riverside and Project Manager
Fall 2009 to Spring 2011	Construction
Spring 2011	Move into expanded and renovated building

3rd Trip to Riverside – December 22, 2005

Key activities planned for this meeting will be to:

- Met with Barbara Custen, the new Library Director. Ms Custen had been the Director of Metropolitan Cooperative Library System in Pasadena

- Met with the Sue Struthers, Youth Services Manager for the Riverside Public Library to review the building program. Ms. Struthers said that having the Youth Area on the second floor was acceptable and perhaps desirable.

- Met with Karen Bracken (951-826-5214) the Riverside Public Library's Digital Systems Specialist to review the draft language in the building program. Ms.

Bracken indicated that she would communicate any issues she found to the consultant.

- Met with Gregg Griffin's representative, Cindie Doke, the Redevelopment Coordinator for the Development Department, to continue the discussion of the process and timing of the expansion and renovation of the Main Library

- Met with Ed Luke, the City's Building Services Division Supervisor to review the building standards referenced in the draft building program. Mr. Luke indicated that he would contact the consultant if there was any reference in the program that was not in line with the City's standards.

Documents Consulted

The following documents and reports were consulted for this study:

- Public Library Association, Statistical Report 2005

- Riverside Public Library, Main Library Building Study, AnnBeha Architects, October 16, 2002

- City of Riverside, Development Department Activity Update 2003/2004

- *Final Central Library Reorganization Building Program,* David R. Smith, Consulting Librarian, March 29, 1993

- *Riverside, A City of Choices; facts and stats*, Brochure and CD Data Disk from the City of Riverside

- *The New Planning For Results; A Streamlined Approach* by Sandra Nelson for the Public Library Association

COMMUNITY PLANNING PROCESS

A Community Planning process is used to determine the needs and wants of residents. From this information, as well as the information gathered by the library, the library can interpret community general needs and apply them to the library. The process consists of the following steps:

- Community Vision and Mission

- Community Needs

- Community Needs the library can meet

- Library Vision Statement

- Library service responses

- Library goals and objectives

THE CITY OF RIVERSIDE

The Mission of the City of Riverside:

The City of Riverside is committed to providing high quality municipal services to ensure a safe, inclusive, and livable community

The Community

Riverside is set apart by its distinct "sense of place" - a unique identity that differentiates the City from the suburban development that defines much of the region. Key to this identity is Riverside's urban downtown with its rich, historical architecture, charming outdoor pedestrian mall and multiple cultural and arts venues. The downtown is home to a thriving office market anchored by city and county administrative centers and cluster of state, local, and federal courts. Known as a "City of Trees" Riverside offers diverse neighborhoods, from the historic "Wood" streets to planned communities with new schools, parks, and trails. More than 40,000 students attend four local colleges and universities—University of California, Riverside, La Sierra University, California Baptist University and Riverside Community College.

Riverside is the sixth largest city in Southern California and the eleventh largest in the state. The City ranks number one in the Inland Empire in virtually every measure of economic power.

Downtown Riverside is a flurry of activity during the day with a large office population, and a growing level of activity at nights and weekends. Some new downtown projects in the works include[i]:

- 500,000 sq ft. of new office space
- 2,000 new residential units according to the Mayor at the meeting of the City Council December 20, 2005.
- The Plaza at the Mission Inn
- Fox Theater conversion to a regional performing arts facility
- RCC Riverside School for the Arts under construction
- UCR Culver Center for the Performing Arts under construction

The Downtown Cultural Consortium includes the Riverside Art Museum, the Metropolitan Museum (a department of the City), the Mission Inn Museum, the UCR California Museum of Photography, the Riverside Public Library, the Riverside Community Arts and the Municipal Auditorium.

Riverside City Demographics[ii]

Some demographic information about the City of Riverside includes:

- Population (year 2000): 255,166, Est. population in July 2004: 288,384 (+13.0% change)

- Males: 125,705 (49.3%), Females: 129,461 (50.7%)

- Land area: 78.1 square miles

- Zip codes: 92501, 92502, 92503, 92504, 92505, 92506, 92507, and 92508.

- Median resident age: 29.8 years

- Median household income: $41,646 (year 2000)

- Median house value: $138,500 (year 2000). This figure is low based on the rapidly increasing real estate prices in Riverside County.

- Races in Riverside *(Total can be greater than 100% because Hispanics could be counted in other races)*:

  - White Non-Hispanic (45.6%)

  - Hispanic (38.1%)

  - Other race (21.0%)

  - Black (7.4%)

  - Two or more races (5.1%)

  - American Indian (2.1%)

  - Filipino (1.2%)

  - Chinese (1.1%)

  - Vietnamese (1.0%)

  - Korean (0.7%)

  - Other Asian (0.7%)

  - Asian Indian (0.6%)

- *For population 25 years and over in Riverside*

  - High school or higher: 74.9%

  - Bachelor's degree or higher: 19.1%

  - Graduate or professional degree: 7.9%

  - Unemployed: 7.9%

  - Mean travel time to work: 28.7 minutes

- *For population 15 years and over in Riverside city*

  - Never married: 32.5%

  - Now married: 49.1%

  - Separated: 2.8%

  - Widowed: 5.4%

  - Divorced: 10.1%

  - 19.9% foreign born (14.2% Latin America, 3.9% Asia)

  - 35% speak a language other than English at home (5 years and over)

  - Population change in the 1990s: +24,113 (+10.4%).

Community Needs

The City's Planning Department took on the task of determining the future Riverside that its residents want. Early in 2002, hundreds of Riversiders offered their ideas, solutions, and creativity to address some difficult and often emotional issues, including how to ensure a high quality of life. Some of the key needs expressed by Riversiders included:

- Safe neighborhoods as centers of community life;

- A strong K-12 education system that benefits from a mutual partnership with the City's three exceptional universities and one college;

- A vibrant city with thriving arts, culture, and entertainment venues that embrace and nurture the diversity of the community;

- An attractive network of safe parks and accessible open space;

- The retention of our rich architectural and citrus heritage;

- Manageable traffic with a variety of ways to get around the City and the Region;

- And a healthy economy, with a dynamic downtown, prosperous entrepreneurial business community, and ample high quality employment opportunities.

The City is conducting an update to the *General Plan* and it is available in draft form. It may be viewed at: http://www.riversideca.gov/planning/genplan2025-2.htm

Community Needs the Library can meet

The Riverside Public Library can help meet some of the key needs expressed by citizens in the 2002 survey:

- Promote continued positive development of young people by supporting early reading readiness and K-12 education system by providing supplemental

materials to support the curriculum requirements of the schools, as well as provide materials, programs, and activities for independent learning.

- Support the college and universities by sharing materials, especially in the areas of art and local history

- Contribute to responsible citizenship and economic health by promoting literacy and shared resources for life-long learning

- Enhance downtown as a cultural and recreational center through continued cultural programming partnerships

- Preserve the historical legacy of Riverside through an excellent local history collection

- Provide books, periodicals, government documents, media, and electronic resources as a source of information required to maintain and grow a vibrant business community

- Contribute to a dynamic downtown

- Foster access to and preserve the Library's special collections

THE RIVERSIDE PUBLIC LIBRARY

Vision of the Riverside Public Library

The Vision of the Riverside Public Library is to be the foremost promoter of self-directed life-long learning. We spark curiosity and provide tools for discovery.

The Riverside Public Library's History and Planning

Riverside Public Library was established in 1888 and the first library building was opened to the public July 31, 1902, funded in part by a grant of $20,000 from Andrew Carnegie. It was located on the corner of Orange and Seventh Streets. In the mission style, constructed of brick, covered with cement stucco, it was regarded as one of the most attractive libraries in southern California. A children's room was created as part of an addition completed in 1909 partially funded by another Carnegie Grant.

Library Director Joseph Francis Daniels established the Library Service School in 1912. Ethan Allen Chase created the Library's first trust fund in 1912. In 1917 Riverside voters defeated a $40,000 bond issue and caused the loss of matching funds from the Carnegie Foundation to expand the library and the Library Service School. In 1920 the City Council appropriated $30,000 to purchase adjacent houses for the School in return for $25,000 from the Carnegie Foundation for a new reference wing.

A bond issue for $1.7 million dollars to build a new library building was passed by 69% of Riverside's voters in 1961, after having been defeated six months earlier. The new library designed by Riverside architectural firm of Moise, Harback and Hewlett, was

dedicated in 1965. The demolition of the Carnegie Library in front of the new structure was immediately controversial and stimulated the founding of the historic preservation movement in Riverside. There are currently over 108 City Landmarks, 11 historic districts, 22 National Register Listed resources, and 2 National Landmarks. The Moise, Harback and Hewlett library, in the sixties modernist style, will be fifty years of age and eligible for listing on the National Register of Historic Places in 2015. Moise, Harback and Hewlett was a large and respected firm concentrating on schools and other institutional structures. The current Main Library is a fine example of their work and the period and style of architecture of its period. It is one of the most significant structures of this style in Riverside perhaps surpassed only by the UCR carillon by A. Quincy Jones.

In the Master Plan Study of Libraries, prepared by the Planning Department in 1968, the Main Library was described as:

- A part of the cultural heart of the urban area

- A repository of unique collections of printed and recorded materials

- A facility for intense academic, political, or technical research

- A facility for book circulation among workers and residents in the downtown area

A unique reference collection of early printed books, books about art and artifacts, and some of the important small press works from the early twentieth century has been gathered in the Main Library. During the 1970s and 1980s, the collection of art and art history was augmented with federal funds as a Major Urban Resource Library (MURL). Together with local history materials including items on the early citrus industry, these materials are an irreplaceable source of natural history, the history of art, and the history of printing.

In 1989, the Library received a gift from the estate of Dr. Lola Pedlow through the Community Foundation. The significant endowment allowed the augmentation of the book collection with "items of enduring value." The current collection of 300,000 items is the largest circulating collection in Riverside County. The reference collection is the largest between Los Angeles and Phoenix, Arizona. The headquarters of the Inland Library System has been housed in the Main Library for 30 years to take advantage of this collection in their role as second level reference for the sixteen member cooperative library system serving libraries in Inyo, San Bernardino, and Riverside Counties.

The rich historical diversity of the city is recorded in the Jess Carlos Mexican American Heritage Collection, the Martin Luther King, Jr. Collection, and in Spanish, Chinese, Islamic, Japanese and Korean, and soon to be East Indian, materials housed in the Main Library. These materials complement Riverside's international commitment through Sister Cities International.

The Sendai Court was created as a tribute to the friendship between Riverside residents and residents of Sendai, Japan. A Friendship City relationship was formalized in the 1960s as one of the first established under President Eisenhower's People to People

program. Today, Riverside has six Sister Cities; two in Mexico—Ensenada and Cuautla; Gang-man, Korea, Jaingmin, China, Hyderabad, India, and most recently, Petermaritzburg, South Africa.

The children's collection is a distinguished and comprehensive collection of current and historical materials for children. Rare and unique items in the history of literature for children are part of the Dorothy Daniels Memorial Collection.

Picture Books and Easy Readers constitute 3.7% of the collection but their circulation accounts for 12% of the business at Main Library. Over all circulation of children's materials including Picture Books and Easy Readers accounts for 31% of the total circulation at the Main Library.

The 1983 introduction of computers necessitated re-wiring of the 1964 building. The automated system was housed in the basement until the telecommunication ports servicing the County libraries outgrew the capacity of the building. Riverside's migration to Innovative Interfaces automated library system in 2004 returned the server to Main Library as a node on the City's telecommunication network. Today, the Library is linked with a consortium of 35 public and academic libraries, sharing a union catalog and providing free interlibrary loan of more than 15 million items to RPL borrowers.

A Space Utilization Study in 1993 identified the general physical limitations of the Main Library building including a lack of general space, parking access problems, absence of windows, and inadequate staff work spaces. User areas and services not adequately provided for included

- children's area
- quiet study spaces or study rooms
- special collections
- new technology

The 1993 report of Partners for Livable Places and Project for Public Spaces recommended a build-out in the plaza between the present building and Mission Inn Avenue. The report estimated that new construction for 33,000 sf. and remodeling of the existing building's 60,000 S.F. to cost $12 million.

The City's General Plan (1994) recommended "Main Library should be developed as an anchor in the Downtown and a focal point along Seventh Street as the heart of Riverside's Arts, Culture, and Entertainment District."

However, the campaign for a dedicated parcel tax for the library in 2002 did not include funding for new library construction. Survey research established that the voters wanted better utilization of existing libraries including more open hours, additional programs, an upgraded computer system, more new books, more and larger neighborhood libraries before a renewal of Main Library.

In October 2002, a study by the Boston firm AnnBeha Architects, noted for their reinterpretation of 1960's architecture, recommended that the original building be preserved and remodeled as a reference library with an addition at ground level for a new children's room, a public meeting room and computer commons. The architects concluded that the Main Library building and site offer many excellent options for improvement and expansion. In their report, the architects suggested that:

- The building's image could be transformed from a hard, solid and unfriendly facade to a building that is transparent and inviting

- Renovating and adding is a more cost effective solution than replacement or relocation

- Opportunity exists for a more cohesive Mission Inn Avenue

- Opportunity exists to enhance ongoing revitalization in the downtown neighborhood through expanded library services, community programming, and new civic spaces

Recent piecemeal efforts have been made to replace the worn carpet and install new service desks with ADA accessibility. Plans are underway to refurbish the auditorium. The Children's collection continues to expand into the auditorium's foyer. The Young Adult collection spills onto the Sendai Court. A self-check machine, installed on the second floor, reduces congestion at the main checkout desk downstairs.

This approach fails to reflect Riverside's growing role as a regional education and high technology center and does not allow the library to meet the standards for library service included in the new General Plan. This sporadic approach to remodeling the interior of Main Library has created visual discord. For the majority of users the Main Library is not a place they enjoy visiting. Not because of the welcoming staff and solid materials and collections, but because of the unattractiveness of the building.

Goals and Service Responses of the Riverside Public Library

Library roles or service responses help determine the products and services offered to the community, and they have an impact on library architecture. Roles are profiles of the library service based on community wants and needs. While a library will typically offer all types of services covered in the many roles available, to be most effective it should concentrate on four or five roles to meet the unique needs of the community it serves. Excellence in library service is achieved by matching roles to community expectations and needs. Roles also determine space allocation and to some extent size and adjacencies in the library. Based on community input to date, the following roles are suggested for the Riverside Main

1   **Community Cultural Center**

The library is a central focus point for community activities, meetings and services, and it is recognized as an inviting, neutral, and safe place to meet by all

individuals and groups in the community. It offers both meeting room space and equipment for community or library sponsored programs. It may also include a gallery for art festivals and shows. The target audience is the out of school community seeking a place to interact and hold meetings and cultural events.

This role helps satisfy the desire of community residents to gain an understanding of their own cultural heritage and the cultural heritage of others. The library provides in-depth collections of materials and resources in many formats and will offer programs and special displays that reflect the cultural heritage of populations in the library service area.

The library staff may be multi-lingual. Print and media materials, the library's online catalog, other electronic resources, and cultural programming may be offered in the languages spoken or read by the residents of the community. The library may also offer resources and services that promote awareness of cultures in addition to those represented in the community.

Possible activities of a Community Cultural Center service

- Lecture, video, and book discussion groups
- Performance and exhibit space
- Dramatic, musical, and dance performances
- Diversity and cultural sensitivity forums

Possible components of the space may include:

- Large, medium and small meeting room spaces
- Community events bulletin board or kiosk, and a WEB site listing activities
- Videoconferencing facilities
- Automated room scheduling

Resource allocation issues:

- The **staff** has wide, direct involvement in many community organizations and a good working knowledge of the community. Both good people and good management skills are required. A good knowledge of audiovisual equipment is necessary as are good public relations skills.

- **Collections** may draw people to the library after they have attended a meeting or program. Collections may supplement programs. For example, the library may have a program about motorcycles, and a special book and media collection about motorcycles might be featured in the library.

- The **facility** is easily accessible, has adequate parking, and contains enough meeting rooms and informal space to accommodate a variety of functions. The meeting rooms should be designed to allow for their use after library hours without compromising the security of the building. Kitchenette and catering staging space should be provided adjoining the main meeting room.

- **Technology** should emphasize traditional technologies such as videocassette recorder/players, DVD players, and video monitors, overhead projectors, for slides and PowerPoint, and microphones. Videoconferencing facilities should be considered.

Design features required supporting the role

- Natural light and views of the surrounding downtown neighborhood

- Non-profit/business conference center: wireless, flexible

- A large, flexible meeting space that will accommodate up to 200 people in a variety of seating configurations

- Two adult seminar rooms that will accommodate up to 12 people each

- Access to the main meeting room when the library is closed

- Electronic resources to support digital projection, slide shows, computer presentations, video presentations, and live and recorded music and drama in all meeting spaces.

- Acoustical isolation to prevent noise from meeting room activities from "leaking out" to quieter areas of the library.

- Comfortable seating with chairs that are light and flexible enough to allow rapid changeovers for a variety of seating configurations

- Established quiet centers

- Exhibit or display space

- Multi-lingual signage

- Facilities for public participation in arts and crafts

2.   Youth Library and Formal Learning Support Center

The library serves as the place where children are introduced to the library and the world of books, media, and learning. It must be an enchanting and inviting area for young people and offer opportunities for families to interact. The Children's area serves children from birth through eighth grade, and children may use their library cards to borrow all circulating items at the Riverside Public Library.

Riverside Public Library Main Library Conceptual Building Program

The Youth Library and Formal Learning Support Center also offers reference assistance. Librarians can find many print and non-print resources to help in selecting or finding information. Tours and group visits are available for school classes, scout groups, daycare, pre-schoolers, and parent groups.

The Young Adult section should be located as a separate area distinguished by architecture and atmosphere.

Some possible components of a Youth Library and Formal Learning Support Center:

- Space should be inviting and enchanting for children and young adults

- Seating for different age groups from pre-schoolers to mid-teens

- Homework help center

- Space to exhibit special collections and materials

- Areas for families to read and interact with their children

- Electronic and cyber portal

- Tutoring help by staff and volunteers

- Basic library skills and bibliographic instruction

- Electronic links to Riverside City School curriculum sites and other educational sites

Resource allocation issues:

- The **staff** is welcoming and enthusiastically knowledgeable about children's and young adult literature. Staff has a good knowledge of how individuals in their target audience learn and about the topics they are studying. They work closely with school staff to supplement the formal education program, and have contacts in the community to recruit tutors to help children with their assignments. Staff is also familiar with educational technology so that they may assist students in their electronic research. Teen services staff will target community outreach, reader's advisory and programming to older youth.

- **Collections** contain materials in all formats and at levels appropriate to the educational level targeted by the library, and the collections supplement, but do not duplicate the collections of the schools. Access to computers and electronic databases to assist students in their course work is readily available. Collections and media for pre-schoolers should spark their intellectual interests and make them want to read and learn more.

- The **facility** must be enchanting and draw children to the library by its design and atmosphere. Families will be encouraged to linger and interact

with materials and playthings. A "noisy" room of happy sounds is accepted. The Young Adult Section needs to be separate and offer a sense of privacy. It should be easily accessible so that students may visit the facility after school, at nights, and on weekends. The building has quiet space for individual as well as group study and may provide electronic access for distance education.

- **Technology** required to access electronic information is required. Technology will change over the years, and the building must be designed so that these changes in wiring, power requirements, and service points in the building may easily accommodate technology changes. A Loud Room where talking, music, and selected gaming are permitted is a desirable new development.

Design features supporting the role include:

- Group study areas where learners can interact with each other without disturbing other library customers

- Quiet individual study areas

- Space for pre-school story time and group visits by young children

- Space should be fun and interactive and include puzzles, blocks and other developmentally appropriate playthings

- Group study facilities (at least space for home-schoolers to meet, usually fairly large groups of about a dozen children and parents)

- Electronic work stations easily accessible by staff so that they can offer assistance to learners

- Computer portal for accessing electronic information and providing group instruction

- Orientation area for seating from 30-40 students for orientation to the services of the library. The area should have a video projector and smart board for viewing PowerPoint or video materials. This area might be included in the meeting area.

3. Current Topics, Titles, and Life Long Learning

The library provides current topics and titles to fulfill community residents' appetite for information about popular cultural and social trends and their desire for satisfying recreational experiences. The target audience is the general adult population, teens and children.

This role also addresses the desire for self-directed personal growth and development opportunities. The library provides and maintains an extensive collection of circulating materials on a wide variety of topics in which the general

public has a sustained interest. The library has built a substantial retrospective collection on some topics and provides collections in considerable depth in subject areas of local interest.

Some possible components of Current Topics, Titles and Life Long learning are

- Author book signings

- Cultural Learning Center offerings

- Reader's advisory service

- Display shelving

- How-to programs on topics of general public interest

- Special topical displays of materials and resources, bibliographies, pathfinders

- History and biography resources

Resource allocation issues:

- **Staff** is knowledgeable about current popular interests and anticipates publishing trends and potential best sellers. Skill in marketing and merchandising are important. Staff knowledgeable in subject and topics of interest to the general public will provide expert assistance in locating materials of all types and in all formats.

- The **collection** includes current and popular materials in a variety of formats, with sufficient duplication to meet demand. Most of the circulating collection has been published within the last ten years, and is extensively weeded to eliminate materials that are not being used. Materials will be offered in formats and languages people want and will be selected primarily on the basis of local demand. The library's collections will be organized in ways that make items easy to find and will be merchandised to the public through the use of displays and display shelving.

- The **facility** promotes browsing, has attractive displays, wide aisles, and good signage as well as adequate and easily accessible shelf space, casual seating and parking that meets community needs.

- **Technology** assists staff in providing a high level of readers' advisory service.

Design features supporting this role include

- Display units with sloping shelves
- Dramatic spot lighting to promote the area
- Video and audio materials displayed as in video stores and available in sufficient quantities for immediate loan
- An ample, comfortable, quiet area for relaxed reading
- Easy to follow arrangement sequence of materials
- Self-service graphics coordinated with maps and flyers

4. Reference and General Information

This role helps meet the need for information and response to questions on a broad array of topics related to work, school, and personal life.

Some Possible Components of Reference and General Information Service:

- Print, non-print, and electronic resources that cover a broad variety of topics

- Staff skillful in determining users' needs and in locating relevant information that satisfies those needs at the level of service desired

- Dedicated telephone/fax reference service (not located at the reference desk)
- Internet access provided for staff and public use

Resource allocation issues:

- The staff providing Reference and General Information service should be informed about a broad range of topics and should possess a good knowledge of how to retrieve information. In libraries where multiple staff members provide the service, staff with varied formal education backgrounds is desirable. Staff needs to become highly skilled in database searching and should be familiar with a variety of computer search engines to access resources on the Internet. Staff knowledge in historic research methods and in archival and records management will be available to assist library users with their research.

- Collection and Information Resources include the entire collection, not just non-circulating books designated for reference. The reference collection retains unique and useful indexes and sources to out-of-print materials as well compilations of esoteric, hard-to-find historic data. Computers should be able to access a full range of information resources. The library catalog and other general information resources should be available twenty-four hours per day

through the World Wide Web. The library also maintains special collections of historical interest including photos, oral histories and archival materials. The library may digitize these collections and provide computer access to them.

- The facilities should provide both for interaction between library staff and library users and for quiet study. Tables and study carrels should be available in numbers that meet demand during the heaviest use period. Individual study rooms and small group study facilities may be provided. Workstations for both standing and seated computer use (short use and extended use) should be considered. Rare, fragile, and archival materials should be housed in secure and temperature and humidity controlled environment.

- Technology required to access electronic information is required. Technology will change over the years, and the building must be designed so that these changes in wiring, power requirement, and service points in the building may easily accommodate technology changes. Technologies such as local and wide area networks should be used to distribute information broadly. Computers, printers, and monitors capable of displaying and printing high-resolution graphic images may be required for public access to fragile historical documents.

Design features supporting the role include:

- Quiet area for interaction between library staff and library users offering privacy as needed

- Sufficient computer workstations for staff and public

- Secure and temperature and humidity controlled environment for special collections

NEED FOR A NEW LIBRARY

Problems with the Existing Main Library

The problems with the existing Main Library are many, and may be grouped into three broad categories: lack of space, image, and functionality.

The existing main library does not have adequate space to serve the needs of the people of Riverside.

- The children's room does not have space to accommodate all the children who wish to visit the room or for the classes that visit the library. The children's room is not able to accommodate story hours or performances.

- There is not adequate space to serve the teen population and this population often stops using libraries because they do not consider libraries exciting or important to them.

- Those libraries that have a stimulating teen space find that it is a magnet drawing teens to the library.

- There is no room for more materials.

- Reader's seating is inadequate and in most cases uncomfortable.

- Space for community meetings, cultural programming, and other public meeting and exhibit space requirements is entirely inadequate.

- There are an insufficient number of public access computer terminals available to address demand.

- Access for persons with disabilities is severely limited.

- Staff workspace is inadequate reducing productivity.

The image of the building externally and internally is not inviting and does not respect its neighboring buildings.

- The Mission Inn's architecture reflected the original Carnegie Building on the library site. The demolition of the Carnegie Library and construction of the Main Library destroyed the relationship.

- The view from the street into the building is not very exciting. While the landscaped areas in front of the building are attractive, the building seems inaccessible from the street.

- The lack of fenestration does not invite users into the building.

- The exterior of the building is not architecturally significant.

- Interiors are dated, dark, and uninviting.

- Because of the interior architectural atmosphere, people want to get their library materials and not linger in the building. This negates the serendipity of discovery that often occurs in libraries, museums, and places of learning.

Functionality describes how well the building meets the requirements of contemporary library service, and how easy it is for library customers to navigate through the building. The existing Main Library as it is configured is not easy for customers to use and difficult and expensive for staff to supervise.

- Flow between sections of the library is not apparent and going from one area to another is confusing for customers.

- Staff areas are overcrowded and in many cases separate from the service areas and the public.

- Areas such as audio-visual have grown without relationship to supporting library activities.

- The building needs to be more horizontal. Its vertical design creates a lot of wasted space because of stairs and elevators.

Estimating the Space Required for the Main Library

The existing Main Library provides 61,420 square feet of space on three floors. Designed by the Riverside architectural firm of Moise, Harbach, Hewlett, it was opened in 1965 and reflects the architecture of the period.

In determining the size of an expansion to the Main Library, there are three guidelines that are helpful: Standards, Benchmarking, and Programmatic Needs.

Standards

The Public Library Association, a Division of the American Library Association has moved away from standards, and instead believes that each community is unique and must determine the size of library buildings by determining community needs, preparing a library program to meet those needs, and calculating how much space is needed to support the program. This is the approach discussed below.

However, the Public Library Association still has a standard of 0.7 square feet per capita on their books, and the City of Riverside's new General Plan standard for libraries is also 0.7 square feet per capita.

With a population of 300,000 people (expected in the near future), both the PLA and Riverside standard calls for total library space of 210,000 square feet. With the existing base of libraries and the libraries expected to open in the near future, the City will have total library space of ~~114,436~~ *123,876* square feet, or ~~0.381~~ *0.413* square feet per capita, or ~~0.319~~ *0.287* under the approved City Standard. Based on both the Public Library Standard and the City of Riverside's adopted standard, the Riverside Public Library lacks ~~95,564~~ square feet.

86,124

Library Facility	Square Feet	Opened
Arlington	4,000	1909 (renovated 1966)
_12,800_	9,000	To be expanded by ~~2007~~ _Jan 2008_
Casa Blanca	10,000	2003
La Sierra	11,000	1976 expanded 2002
Main Library	61,420	1965
Marcy	4,200	1958
Eastside Library and Cybrary	10,816	2005
Orange Terrace _13,640_	8,000	To open ~~2007~~ _2008_
Total for Riverside Public Library	~~114,436~~ _123,876_	

Benchmarking

Benchmarking is a standard method to compare the quantitative aspects of library service. A library system might select five or six libraries that serve similar libraries based on population size, square miles of service area, demographic characteristics of the community, etc. The complete table is reproduced in Appendix A. For this study, the following benchmarked libraries were selected:

- **Glendale, CA**
- **Huntington Beach, CA**
- **Pomona, CA** _lowest_
- **Pasadena, CA**   _Riverside - 2nd lowest_
- **Saint Paul, MN**
- **Newark, NJ**
- **Madison, WI**

All of the libraries selected are close to Riverside in the population and area served. Statistics are from the latest edition of the Public Library Data Base.

Riverside Public Library Main Library Conceptual Building Program

Libraries	California					Other States			
	Riverside City PL	Glendale, CA	Huntington Beach, CA	Pomona, CA	Pasadena, CA	Saint Paul, MN	Newark, NJ	Madison, WI	Mean
Population Served	274,100	205,300	197,000	153,900	144,000	287,151	272537	217,935	218,990.38
Sq. Miles	79.00	30.60	26.40	22.90	44.50	56.00	23.80	77.60	45.10
Central Library (sf)	61,420	92,000	115,000	57,000	135,000	90,353	89,636	95,000	91,926
Central Library sf per capita	*lowest* 0.234	0.448	0.584	0.370	0.938	0.315	0.329	0.436	0.46
Branches	7	6	4	0	9	12	10	8	7
Branches sf	53,016	66,013	10,200	0	44,346	144,410	107654	62,565	61,026
Total sf	114,436	158,013	125,200	57,000	179,346	234,763	197,290	157,565	152,952
Total sf per capita	0.417	0.770	0.636	0.370	1.245	0.818	0.724	0.723	0.71
Total Oper. Expense.	$6,546,000	$6,367,268	$4,716,475	$2,747,122	$9,900,732	$13,463,289	$15,680,953	$11,018,965	$8,805,101
Operating Expenditures per capita	$23.88	$31.01	$23.94	$17.85	$68.76	$46.89	$57.54	$50.56	$40.05
Total Staff	95.20	89.90	56.00	39.80	122.00	157.00	174.00	147.00	110
Staff/1,000 residents	2,879	2,284	3,518	3,867	1,180	1,829	1,566	1,483	2,326
Hours of Service/ week	353	220	176	54	122	157	174	505	220

Benchmarking Observations

Of the set of libraries compared to Riverside, only Pomona has fewer feet per capita. Almost all of the other libraries in the comparison are very close to the PLA and Riverside City standard of 0.7 square feet per capita, which is the mean for the libraries studied.

Riverside is fairly built out, and there probably will not be a lot of growth in the outlying areas of the City. There may be one or two more branches built in the foreseeable future, which may add 20-25,000 square feet to the total. Even if two branches are added in the next fifteen to twenty years, the RPL square feet per capita will still be below the City's adopted standard.

In addition, the size of the RPL Main Library is below that of all the other benchmarked libraries except for Pomona.

Programmatic Needs

At the consultant's visit on December 22nd discussions were held regarding what products and services might be offered if the existing restrictions imposed by a lack of space were eliminated. The main areas of expansion and new services were:

- Greatly expanded children's area to act as a magnet and a place of enchantment for the City's children

- Teen area to provide young people with an exciting educational and recreational atmosphere

- Commons center for the community for civic, cultural and educational gatherings and meetings

- Technology center featuring the latest technology and electronic literacy classes for people of all ages

- Media center providing visual and audio resources to educate, entertain, and captivate library users

All of the above services are impossible to provide in the existing library because of a lack of space and physical limitations of the building.

Recommended size of the Library

The existing Main Library has 61,420 gross square feet of space according to the information presented to the consultant. Based on standards, benchmarking, and programmatic needs, it is recommended that Riverside's Main Library be approximately 104,700 gross square feet. A main library of this size is roughly the same size as most of the main libraries in the benchmarking set, bring the total library square footage to

157,716 square feet, and bring up the square feet per capita to 0.527 at the City build out of 300,000 people.

It is the consultant's belief that if a lesser size main library is built it definitely will improve library service. However, not building all that is needed now might be a source of regret in the future. This is a critical time in the library's history and in the revitalization of downtown Riverside, and it is the time to think of what might be.

Alternatives

A number of alternatives are available that may be considered.

Replacement of the Existing Main Library with a New Building

Some have suggested that either leaving the existing site for a new location, or demolishing the existing library and building a new building at the existing location might be the best approach. One of the people the consultant interviewed expressed the feeling that the existing library and site have such a negative image, that only relocation can change the community's view of what a main library should be. But, most felt that the existing site is excellent and it is the proper location for the main library.

Expand and Renovate the Existing Main Library

AnnBeha Architects, in their October 16, 2002 Summary Memo said that *The existing 1965 building is a valuable building resource that should be retained and renovated for collections storage, offices, and other library support needs*. This recommendation seems to be the best solution for a number of reasons.

AnnBeha addressed the location stating that the main library is in a prime location on the cultural corridor of the City and is easily accessible on foot from surrounding neighborhoods and by car and public transit from other locations in the City. They believe that the *Main Library is ideally located and should stay at its present site*.

Economically, expanding rather than building a new building has financial advantages. The cost per square foot for refurbishing and renovating the existing building is probably half the cost of new construction. From information that the consultant has received from Library and City staff, the building is solid and the site offers room to expand.

Recommendation

The consultant recommends that the existing main library be expanded by 45,000 gross square feet. Arguments for expanding on the existing site are:

- Based on information received, the existing library is structurally strong (structural soundness should be verified by an engineer and architect).

- Rehabilitation of the existing main library will probably cost half the cost of new construction

- The library site is an extremely valuable resource and acquisition costs of a new site would significantly increase the cost of the main library project

- There is adequate space at the existing site to accommodate the expansion as well as to provide parking

- The site is historically significant in Riverside's library history

- Revitalization of downtown Riverside will be enhanced by a vibrant downtown library at the library's existing site

- The site is an integral part of the cultural institutions surrounding it

VISION OF THE RIVERSIDE MAIN LIBRARY

Community Needs Met by an Expanded Main Library

An expanded Riverside Main Library will meet many needs of the Riverside Community: A new library downtown will help downtown become more attractive to business, residents, and visitors. A new library will increase the value and attractiveness of downtown as a destination, a place to live and a place to do business.

Needs of the General Public

- Resources and services to support student achievement in elementary and secondary education.

- A comprehensive collection of information resources that will qualify the Main Library as the primary public source of information for Riverside County.

- Resources and services that will support professional development for employees of organizations and agencies in the region, and lifelong learning for all citizens.

- A primary public access point for all citizens to technology systems, resources and the skills needed to use those technologies.

- A venue for public discussion, exhibitions, and programs.

- Resources and services to raise the rate of literacy in the City, particularly for the new immigrant populations.

Needs of Elementary and Secondary Students, Teachers, and Parents

- Teachers and students need additional information resources and services to support student learning, particularly at times beyond the hours of normal school operation.

- Teachers and administrators need information resources and programming to support teacher and administrator professional development.

- The School District needs information resources and programs to support parent education so that parents might be more effectively involved in the learning of their children.

- The School District could benefit from assistance in helping their students grow and develop as individuals and leaders.

Needs of Community Organizations and Agencies

- Community organizations need a place to refer their clients that will be a reliable, primary source of information. Community organizations want (and expect) the Main Library to have an extensive collection of information resources, in all formats, that their clients need for whatever purposes they may have.

- Community organizations need a credible and accessible source for continuing professional education for their staff. The Main Library is a potentially good source for some of that learning.

- Community organizations need to expand public awareness of their programs and services. The Main Library as a central resource for information about all manner of community organizations is something desired by many of these organizations.

- Community organizations want an inviting and welcoming location to serve as a venue for educational and cultural programming for the benefit of their constituents. An expanded and renovated Main Library may seen by a number of organizations as an important public channel to people who might enjoy and benefit from the cultural programming these community organizations can provide.

- Some community organizations want a place for clients to exhibit works of art and other personal expressions.

- Community organizations would like their clients to learn how to find the information they need, including using technologies. In Library parlance, community organizations appear to want the Main Library to play a key role in developing information literacy.

Needs of Special Populations

- Persons with disabilities need access to assistive technologies, and to special materials such as large textbooks and audio materials.

- New immigrants are particularly in need of:
  - Cultural programming.
  - Expanded foreign language collections
  - Literacy programs

o   Citizenship preparation programs

o   Small businesses start-up and maintenance information

o   Education and other services for children and teenagers

The Riverside Main Library in the Community

The Vision of the Riverside Public Library *"is to be the foremost promoter of self-directed life-long learning. We spark curiosity and provide tools for discovery."*

The Riverside Public Library system has played an important role in the life of the Riverside community for more than 100 years. The new Riverside Main Library will continue that tradition and help fulfill its vision by playing roles in the Riverside community that reflect the goals and objectives in the Library and meets the needs of the community. These roles include the following:

- Primary repository of information resources: The Riverside Main Library will continue to play the role of primary repository of information resources for the general public.

- Creator of value-added information seeking tools: The Library will play a role in designing and developing new tools whereby its customers can better find the information they need.

- A nexus for community events and dialogue: The Riverside Main Library will be one of the premier venues for social, cultural, and educational events in the City.

- An important purveyor of educational programming: Working closely with education organizations, museums, and other educational institutions, the Main Library will be an important educational institution in the City of Riverside

- The keeper of community memory: The Library will serve a role as one of the important memories of the Riverside community, as it assembles records and information about and by community residents.

An Architectural Jewel

With its presence and location in downtown Riverside, the expanded and renovated library has the potential to become the architectural jewel of the region. Replacing the facade of the existing building and adding new areas will present the selected architect a canvas to transform a very ordinary building into one that complements and honors its surroundings and heritage. A great architect can transform an ordinary building into the centerpiece of downtown Riverside.

A colonnade surrounding the building will encourage pedestrians to stroll along the library site and fenestration will activate the building and encourage people to enter. The colonnade offers an opportunity for retail activities on the site.

An Expanded and Renovated Main Library

Riverside needs an expanded and renovated library to meet the demands of its customers and fulfill its role as the people's university. An expanded and renovated downtown library WILL BE:

- Riverside's Premiere Civic Space
- A Cornerstone Of Riverside's Educational System
- An Engine For Economic Development
- An Anchor And Catalyst of downtown Riverside's revitalization
- A Conduit to Connect Communities by creating a Riverside Commons
- Accessible To All
- An Artistic And Cultural Eden
- In sum, it will be WONDERFUL!

CONCEPTUAL BUILDING AREAS

Spaces

This building program is a conceptual program. A conceptual program is the starting point for discussions with staff, community leaders and activities, and the architect on what the Main Library may be. Thus the spaces listed are in gross square feet and will be modified by further study and discussion.

A complete building program will refine space requirements and add detail such as the number of shelves, seats, etc. that the architect will use to design the building.

Appendix B is a spreadsheet listing spaces for the expansion.

Adjacency Drawings

Appendix C is a visual representation of spaces listed in **Appendix B**.

GENERAL BUILDING REQUIREMENTS

A. General Requirements

The building must conform to Riverside City and County building code and standards for use as a public building. The specifications of the American Standards Institute, Inc., *American National Standards for Buildings and Facilities-Providing Accessibility and Usability for Physically Handicapped People*, A117.1-1986 should be consulted and plans must conform to provisions of the American With Disabilities Act of 1990 (ADA) as set forth in the Federal Register.

Functional Interrelationships

The library needs to build the proper interrelationships between interior spaces. Often it involves subtle visual, acoustic, or other factors that exist within libraries. The space adjacency diagram in the program **Appendix D** indicates how to link related functions together. The diagram ensures a comfortable level of staff supervision, separates noisier activities from quiet areas, and provides a clear user orientation and progression through spaces.

The three major forms of traffic within libraries—public movement, staff movement and library materials movement—must each have their own sense of clarity, simplicity, and efficiency.

Architectural Character

The following section describes concepts that are basic to this program and the philosophy of library design behind it. These planning and design considerations are generally applicable to the entire main library facility.

The overall planning and design priority of the main library is to be very supportive and oriented to the public user of the library, while also being efficient, effective and enjoyable for staff. The new library should:

- Take advantage of the location in downtown Riverside, and create a synergy with the surroundings.

- Have the architectural character and power that makes the main library a focus of the community.

- Recognize and build on the architectural quality of the current building and assimilate it into the fabric of the Downtown Historic District by:

- o Pulling it to the street front with a pergola (including some architectural reference to the old Carnegie Library and Mission Inn)

- o Making it more transparent and welcoming with the commons and children's area in one tower and three story "glass" structures in front of the current building on top of an underground level that connects all of the structures and provides support services for all

- Be a building that is distinctive in appearance yet in harmony with its surroundings.

- Welcome, encourage and attract users of all ages and stimulate their mental activity.

- Welcome, encourage and attract traditional non-users of the library. The building should be attractive and interesting enough to attract many new users because of the power of its presence as a physical destination.

- Take full advantage of the site as a civic building that serves as "the center" or "signature" to downtown Riverside

- Welcome users who are traveling by foot or automobile.

- Create a building that is unmistakably public in character and function, yet comfortable and non-intimidating.

- Consider light, books, people and the surrounding space as integral to each other.

- Express symbolically the important value of knowledge and learning.

- Merchandise the products and services of the library by incorporating design features that are successful in retail merchandising. The best practices of successful bookstores and other retail stores should be mirrored in the library's approach to merchandising its services.

- Solve the paradoxical needs within a library of spatial openness and seclusion by creating the ability to orient oneself within the visible total enclosure, yet not feel anchored to a particular part of it.

- Create a space that allows easy supervision by staff; yet allow users to not have a sense of being left exposed in an impersonal large area.

- Create a gradation of different spaces within the library ranging from open areas of public activity to alcoves of semi-private activity.

- Devise areas that have a sense of intimacy within the overall public setting.

- Design a wide variety of reading areas so that users have many choices to fit their mood or reading environment needs.

- Allow a clear understanding upon entry to the library (and while moving within the library) of the general purpose of each library area.

- Visibly identify staff and places where they can get help.

- The exterior of the library should incorporate design features that take advantage of the unique climate, character, and style of Riverside.

- The exterior must respect the unique architectural design of the Mission Inn. This does not mean that it needs to copy the architecture of Riverside's most prominent landmark, but rather not offend it.

- The architectural style should be in harmony with the overall design of the buildings adjacent to the library. The building must be distinctive yet not offend its neighbors. It must celebrate the unique background and heritage of its residents.

- Exterior and interior fixtures, surfaces, and equipment should be as vandal proof as possible. For example, many new libraries have been experiencing problems with exposed ground level surface lighting fixtures. The fixtures are being destroyed by vandalism and by accident. Selection of all fixtures must take into account their ease of repair and durability. Care should be taken to protect the site and building from abusive skateboarding.

- Create exterior surfaces adjacent to the library that discourages skate boarding, in-line skating and extreme bicycle activities.

- The interior design should reflect a theme in harmony with the exterior of the building. Interior finishes should create a space that is inviting to users, stand up to the wear and tear of **heavy public use**, and be flexible to take advantage of changes in public library products and services as well as changing technology. ***Public libraries are subject to more use and abuse than almost any other type building, and interior and exterior equipment, furniture, fixtures, and surfaces must be able to accommodate this heavy use.*** The exterior, interior, and furniture, furnishings and equipment must be almost indestructible.

Patterns of Public Use

A clear understanding of the pattern of public use of a main library will aid the design team in creating a supportive library environment. The pattern of use in a community library differs significantly from a Main library or academic library.

In many ways, the planning and design of a public library need to be similar to a self-service supermarket or bookstore—the key issues are clear routes of movement and orientation, easy supervision by staff, efficient storage of materials and active enticement of casual users.

Users will come to the main library with different interests as well as different abilities to locate information. Finding a book or a magazine will frequently be at random---by browsing, by the reader searching for books by a favorite author, or

by the newness of materials. In many cases the reader will locate books and media without consulting a catalog.

Because of the various patterns of public use, it is vital that the library merchandises its book and media collections. This can be accomplished by: displaying materials in high traffic areas; using back slant shelving, zigzag, and bin displays; and employing other merchandising and display techniques used by successful retailers. This technique should be employed throughout the library and not just in the new book areas.

Casual retrieval of books by customer is often accompanied by a certain amount of sampling in order to make a choice. Therefore, the function of retrieval and an immediate check on whether or not the resource is likely to be of interest should be possible within the same space; this double activity is one of the characteristics of public library use. It is desirable to have seats and reading surfaces near the shelves.

However, casual retrieval does not always occur. Some users will seek information for a specific need only available at the main library. Intense and prolonged use of the library's resources can often occur by individuals pursing a personal interest. In this situation the library becomes more analogous to a research library.

It is also important to note that many readers do not always need the accepted arrangement of a table and chair, particularly if reading only one book at a time. Most people reading a book at home will do so in an armchair, and there is no reason why a library user cannot move from a table a comfortable chair.

The main library also is a social gathering place for people who just enjoy being around other people, or for children on their way home from school. Therefore, the library must also support a comfortable level of casual conversation and quiet interaction in what are traditionally thought of as very quiet individual spaces. The library meeting and seminar rooms can fulfill this need. By designing these rooms so that they may be easily supervised and acoustically isolated, controllable group interaction activities can take place.

Flexibility

Over the next several decades, as has been the case in the past, the RPL will experience an extensive evolution in collections, services, and user needs. Flexibility must be a major feature of the project's design. However, this does not mean that **every** area of the library needs unlimited (and costly) flexibility.

Traditionally, libraries have relied on creating large open spaces with a minimum of columns, load-bearing walls or other constraints to modification. While there is no reason to abandon this policy, it must be carefully evaluated along with

other priorities (such as the need to provide a variety of spatial areas so that the library user can choose an area that best suits their mood or need at the time of use).

The building should be designed on the module principle--interior load bearing walls are not acceptable. The module or bay spacing must be as large as the budget will allow and must take into consideration the standard library-shelving module of three feet. Building columns must be few and unobtrusive as possible.

Attention to the spacing of columns, shafts and other architectural elements will also ensure flexibility and the effective use of space. The standard shelving module is 36" wide and either 10" or 12" deep. All areas (except the Reference Area and the picture books in the Children's Area) should use 10" deep shelving. In addition, 42" aisle width is required between all shelves. All of these spacing factors are summarized in the chart in Appendix D. To disregard these factors and place columns incorrectly by even a few inches may cost the library many crucial linear feet of book storage capability.

The minimum floor-loading requirement throughout the building is a minimum of 150 pounds live load per square feet to accommodate the weight of stacks. For compact shelving, the live load per square feed increases to 300.

See Appendix D for Structural Stack Spacing Diagram - This diagram will be updated in the final building program

Other Overall Flexibility Concerns

The building systems within the library will greatly influence long-term flexibility. Lighting fixtures, air ducts and registers, electrical power, and communication linkages for terminals should be carefully located throughout the library to permit alternative layouts in the future.

The facility should be planned and wired to accommodate a future small satellite dish and/or microwave communications.

Power grid in section, or fiber optic networks should be utilized to provide the power and communications flexibility required for adjustments to the library's internal layout. A raised floor in areas serving a large number of electronic units should be considered.

Storage Efficiency

Shelving layout as well as the height of bookshelves influences storage efficiency. Seven-shelf high units (full height 82") are recommended throughout the Adult and Young Adult Areas, with four-shelf high units (full height 42") suggested for

all areas within the Reference Area. The Children's Area is recommended to have four-shelf high units (42") and five-shelf high units (60") throughout. These shelf heights can be used in conjunction with the table below to calculate book storage capacity. No shelf should be less than 10" deep.

Book Storage Assumptions:

Media	Depth of Shelf	Volumes Per Shelf-Foot
Adult Fiction	10"	9.0
Adult Non-Fiction	10"	8.0
Reference	12"	6.0
Bound Periodicals	12"	5.5
Picture Books	12"	20.0
Children's Books	10"	15.0
Display Shelving	12"	2.0

In addition to pure book shelving efficiency, the shelving layout should define reader areas as well as break up large spaces into more intimate spaces. Care must be taken to avoid blocking the view from staff areas to the readers and to avoid heavy traffic among readers. Every attempt must also be made to locate rows of shelving so that the books can be grouped logically according to the library classification scheme.

Current Riverside Public Library Collection

Type of Materials	# Of Units	% Growth	30 Year Total
ADULT			
Adult Circulating	165,940	20.00%	199,128
Reference	38,550	5.00%	40,478
Special collections	4,055	5.00%	4,258
Paperbacks	9,397	25.00%	11,746
Audio CDs	9,298	50.00%	13,947
Video DVDs	11,486	75.00%	20,101
Young Adult	5,370	100.00%	10,740
Magazines	2,727	5.00%	2,863
Total Adult	**246,823**		**303,260**
CHILDREN'S			
Children's Circulating	31,347	20.00%	37,616
Reference	4,140	5.00%	4,347
Special Collections	1,545	5.00%	1,622
Picture Books	11,328	15.00%	13,027
Paperbacks	8,212	50.00%	12,318
Magazines	707	5.00%	742
Audio	1,013	100.00%	2,026
Video	1,474	100.00%	2,948
Total Children's	**59,766**		**74,647**
TOTAL COLLECTION	**306,589**		**377,908**

Book Capacity Targets (Note: This table will be completed as part of the final building program):

Books & Media	#	Units	Sq. Ft/Unit	Sq Ft.
Adult				
Circulating				
Circulating Foreign Language				
Reference				
Rare Books and Special Collections				
Paper Backs				
Display				
Audio CD's				
Video DVD's				
Young Adult				
Magazines				
Total Adult				
Children's				
Circulating				
Children's Reference				
Children's Special Collections				
Curriculum Collection				
Picture Books				
Paper Backs				
Magazines				
Audio				
Videos				
Total Children's				
Total				

User Seating Preferences

Observation and behavioral research has shown that rarely will more than two people sit at a four or six-person reading table, unless the people know each other. This indicates that small tables and carrels will work better than larger reading tables and the recommendation is for table seating for no more than four people.

Rectangular tables are considered to be generally better for work and concentration, while circular tables are best for conversation. On a rectangular table, a person can more easily mark his or her territory. An exception to this is in the children's area of the library. A good mixture of circular and rectangular tables may be best there because many children like to work together or sit side by side.

Comfortable seating in lounge or casual chairs is very popular with readers, and needs to be included. Care should be taken to make sure that heavy wear areas such as arms and head-rests are made from materials that will take heavy use and can easily be replaced.

Each seat in the library requires access to electrical and data connections. Please see the specifications for electrical and data connections below in.

Seating is not listed for the on-line public catalogs located in the adult and children's areas. Some of these catalogs may have seats, and this decision will be made as schematic design proceeds.

Seating Targets (Note: This table will be completed during the final building program):

This program suggests the following seating targets for the 100,000 square foot expanded main library. These figures are the total figures for all types of reading areas for adults, young adults, and children within the library as well as seating associated with the reference area and meeting areas:

Seats	# Required	# Seats	Sq. Ft.	Total Sq. Ft.
Adult/Young Adult				
Lounge				
Nook & Informal Seating				
Carrel				
Table (4 Place)				
Young Adult				
Electronic Units				
Total Adult				
Children's				
Lounge				
Nook Seating				
Carrel				
Table (4 Place)				
2 Place AV listening viewing station				
Electronic Units				
Total Children's				
Total Public Service Seating				

Seats	# Required	# Seats	Sq. Ft.	Total Sq. Ft.
Community Room Areas				
Meeting/Auditorium				
Small Community Rooms				
Children's Multi-Purpose Room				
Seminar Rooms				
Total Community Seating				
Total Library Seating				

Staff Control over Collections and Public

A main library of this size must be designed to operate effectively with very limited staff. Budget limitations preclude the possibility of additional staff. Operating effectively means being able to offer a service-oriented program in which the building does not create unnecessary time-consuming tasks for staff.

Good visibility (yet intimate feeling spaces) not only gives staff a feeling of supervision (and the public a feeling of safety) but it also can make it easier for the library's customers to understand the layout of the building and the location of materials. Directions are easy to give because most sections are visible from any point.

The library's design should promote visual control and supervision by staff. However, the public should feel only a general sense of control without it dominating the experience. It is very important that all areas of the main library be visible from as few service desks as possible because staff is not expected to expand greatly with any changes to the main library. A closed circuit video surveillance system should be used to monitor areas not visible from staff desks. Supervision can be supported through the careful layout of furniture and equipment as it relates to the circulation desk, service desks and entrances/exits.

Public entrances (preferably one) should immediately relate to the staff at the circulation desk. Emergency exits must also be visible by staff in their normal areas, and alarmed to alert staff to unauthorized egress. Visual control should be strong in potentially troublesome areas such as the entrance to public restrooms.

Library Security

Problem customers or non-customers create a number of harms in libraries including:

- Stealing or defacing materials.

- Causing disturbances or perpetrating anti personnel offenses such a rape, molestation, kidnapping, murder, robbery, drug use and trafficking in illegal substances.

- Vandalizing the building.

- Committing arson.

- Penetrating non-public zones of the library.

- Misusing restrooms.

- Occupying the facility and/or grounds after hours.

- Abusing technology.

Solutions to these problems require good space planning and architecture that optimizes visual surveillance. Some specific recommendations include:

Entry and Interior Considerations

- One entrance/exit point near the circulation desk or greeter station.

- Good lighting of all areas, including walls and corridors.

- Security sensing/screens/turnstiles/gates.

- Stack orientation that allows maximum supervision, and minimizes remote and secluded spaces.

- Alarmed emergency exits.

- Appropriate fenestration from staff work areas onto public spaces.

- A security code system or electronic access to limit public access to non-public areas.

- Staff lockers and lockable personal drawers at work stations.

- Policies for staff response to various security and emergency scenarios.

- Direct sight lines from service desk to entrance and restrooms.

- Clear circulation patterns.

- Reflective surfaces to augment sight lines.

- Open cubicles to house customer's personal items.

- Motion detectors with alarms in storage areas, ceiling plenums, and mechanical rooms.

- Strategic easily monitored locations for highest-traffic functions such as copiers, children's room entry, computer labs, and popular materials browsing.

- An interior with easy to maintain surfaces, corners, and edges.

- Secure attachment of movable equipment to furniture.

- Sufficient staff to monitor areas of the library accessible by the public.

Exterior Considerations

- Good exterior lighting for parking, staff entrance, and surrounding landscape.

- Vandal proof lighting fixtures.

- Hard surfaces that discourage skateboarding.

- No walls or alcoves that could hide lurkers.

- No secluded patios or alcoves allowing people to sleep at night.

- Surveillance cameras and monitors for areas not directly observable by staff.

- Staff areas located to promote staff surveillance of remote public areas.

- The landscaping should not contain loose rocks or other materials that could be used to vandalize the library.

Heating, Ventilating & Air Conditioning (HVAC) Requirements

The following recommendations should be incorporated into mechanical design (Reviewed by Ed Luke, Riverside Building Services Division Supervisor):

- Riverside City staff responsible for maintaining the building must be involved in reviewing the specified equipment with the architect's mechanical consultant in the initial phases of design.

- City staff must review any energy management system specified for compatibility with existing City systems.

- There must be 100% compatibility between the building automation system and the HVAC equipment. No inter-phasing equipment shall be used to communicate between the HVAC equipment and automation system.

- The building automation system must be able to receive information from a pulse meter supplied by the utility company.

- Computers specified to accompany the building automation system must be of the latest technology, and have a local distributor for warranty service. Dumb terminals are not acceptable.

- Systems should be compatible with the latest version of Microsoft Windows, and be accessible via communication software program approved by the City maintenance staff.

- All building automation systems must be able to dial out alarms, have a dedicated telephone line, and modem. A dedicated phone line must be available for use by the building automation system, at time of phone installations.

- Only the latest models of HVAC equipment shall be used. If updates to the designed automation system have been made at the time of installation, the newest version of the equipment should be installed.

- City's HVAC staff will consult with the project engineer during the design and construction phase and participate in the final walks through.

- Safe and unobstructed access must be provided to all HVAC units as specified in manufactures' Operation and Maintenance (O&M) Manuals.

- No refrigerant lines shall be installed below grade or within a concrete slab.

- No HVAC ducting shall be installed below grade or within a concrete slab.

- The utility supplier will use natural gas for heating if available at the street.

- AC units 3 ton and over, will use three phase power.

- Maximum amount of unloading and staging from manufacture's equipment should be purchased. This provides the greatest efficiency and comfort by staging based on system demands.

- If a facility will require 50 tons of air conditioning or more, a hydronic system must be installed. A central boiler will be used for heating hot water and a central chiller will be used for the chilled water system. Multiple fan coils or air handlers will be used with this system.

- Whenever practicable, a scroll compressor shall be used.

- If a VAV system of 5 tons and over is used, it must be either chilled water or multiple compressor system with adequate by-pass. Static bypass damper sensors should be used when a bypass damper is used in a multi-

zone VAV system application. A Trane VAV control system allows maximum occupant comfort in all types of applications. At the heart of the control system is the DDC microprocessor controller, which allows flexibility and stable control throughout the VAV system.

- All refrigerants shall be CFC safe.

- All refrigerators must be free standing, with no built in units or combination units.

- Only standard sized filters shall be used and installed for easy maintenance and access.

- All thermostats must be covered with a metal locking cover. Do not specify programmable thermostats.

- A system time clock with battery back up must be installed.

- Air balancing of the system should be contracted out separately and not be part of the mechanical contract. The contractor performing the balancing must have their balancing verified by the City's HVAC Shop as to accuracy.

- The manufactures' representative and/or mechanical engineer must give training on the operation and maintenance of all HVAC equipment to City HVAC Shop staff, as well as a simplified training to library staff.

- O&M technical manuals for all systems and components must be provided to the City HVAC Shop staff responsible for maintaining the building.

- There must be warrantees provided for compressors and/or air conditioning units 5 ton and under, and extended warrantees for units 5 ton and over.

- Building Automation and Control Networks (BACnet) or their equivalent should be considered. BACnet is a protocol for all building automation needs. It allows functions, equipment and controls of all types from a number of different manufacturers to work together, and is the industry standard.

Energy Requirements and Sustainable Design

The new or expanded main library building should take full advantage of northern daylight for natural lighting during daytime hours, and the southern exposure should support a passive solar energy approach to the thermal aspects of the interior environment. Solar collectors should be evaluated for hot water heating. Insulation of floors, walls, and ceilings should equal or exceed that required by code to minimize the cost of heating and cooling the building. Sustainable design should be incorporated into the planning of the building as much as the budget allows. Some considerations include:

- Provide windows that open to allow natural ventilation and cooling.

- Use construction materials that are minimally toxic and non-carcinogenic.

- Use recycled construction materials as much as possible.

- Use materials that minimize growth of fungi such as mildew, mold, and bacteria.

- Use nontoxic paints such as certain latex brands that are virtually VOC (volatile organic compounds) free.

- Use all natural carpet, and during and after carpet installation open windows to increase ventilation.

- Choose office furniture made from nontoxic materials such as solid wood, aluminum, or steel. If upholstered chairs are used, they should be covered with natural fabrics such as cotton or wool. No upholstery is to be used on chair arms.

- Place copy machines so ozone emissions go directly outside

- Install fresh air vents at roof level instead of at street level. Stainless steel bird guards should be installed on horizontal ceiling air vents to prevent birds from settling on the grates and polluting the shafts below.

- Provide a high efficiency, air filtration system with pre-filters and final filters. Filters should be easy to replace by library staff.

- Provide ventilation with outside air at a level of at least 20 cubic feet per minute (cfm) for every person in the building.

- Use plants inside to help clean the air. Plants' soil and root systems contain microorganisms that digest organic chemicals. Beneficial plants include bamboo, English ivy, spider plants, golden pathos, and mums.

- Use exterior native plants and materials that are drought tolerant in developing the landscape architectural plan.

Electrical Requirements

Even with methods to conserve energy, the demand for electrical energy in libraries will continue to increase over the useful life of the building, and electrical systems must provide for future flexibility.

Convenience outlets should be provided for standard electrical equipment: floor vacuums, scrubbers, polishers, clocks, computer terminals, and audio-visual equipment. Outlets away from walls and pillars should be flush-floor mounted and capped. Floor monuments are not acceptable.

Instead of fixed floor outlets, a raised flooring system (such as the SMED System) should be considered in all areas that may need electrical or communications

relocation over the life of the building. It is suggested that additional empty conduit be run to areas in the library that may require electrical power or communications equipment in the future. The "sweep" on conduit runs must be gradual enough to accommodate fiber optic and coaxial cables.

> An example of a raised flooring system (approximately 3" off the floor), allowing data, power, and other cables to be "buried" under the floor. This type of system provides flexibility and easy relocations of electronic units in the library. If cost does not allow installation in the entire library, the system should be considered for those areas that have the greatest number of electrical units.

Under-floor conduit or ducts are required in public reading areas, circulation desk, and workrooms. **Library staff must review the exact type of system used and locations**. Prior to pouring floors, or enclosing conduit in walls, the architect, contractor, representatives from Riverside's data processing department, and library staff should "walk" the site to make sure that outlets are properly placed.

Every seat and workstation in the library should have access to a duplex receptacle for power, and data communications and/or telephone outlets. All outlets should provide duplex power receptacles, and at least space for four data ports (coaxial, fiber, and twisted pair wires, with a box large enough to accommodate all four types of wire). At minimum a 1" dedicated conduit with a home run from each and every data outlet to the telecommunications room is required, and a ¾" conduit is required for power. Automated systems require dedicated telephone lines.

Each staff workstation should have three to five duplex outlets, and four data communications/telephone outlets.

All cords and cables should be protected and out of site.

Dedicated lines should be provided for equipment requiring them.

A backup power system should be considered.

In addition, the architect's electrical engineer must consult with City of Riverside's Facilities Maintenance personnel during the design phase and throughout the project. The electrical shop should be consulted and their recommendations must be incorporated into the plans and specifications of the library.

Illumination Requirements

Libraries require excellent illumination and control of lighting in both public and staff areas. Lighting is more important to libraries than other public buildings, and its effectiveness will be a major consideration in determining public comfort in the building. Despite its great importance, there are few well-lit libraries in the United States.

Prior to the energy crisis, library lighting, like virtually all-commercial lighting, was steadily increasing in brightness and in foot-candle power. This trend has now been reversed but lighting remains a major concern of library planning.

Fluorescent lights reflected back to the ceiling to create a low-glare ambient light are recommended, although downward task lights at reader areas throughout the library will also be needed. Illumination should be color corrected to be relatively warm in color but not necessarily even throughout the library. If financial reasons make it necessary to compromise on the lighting, then it is preferable to somewhat reduce the intensity of the lighting rather than to use fixtures that produce glare. High intensity light of poor quality is less desirable than low-intensity light of good quality.

Special attention should be paid to lighting over stack areas to ensure flexibility in the future arrangement of shelving, as well as adequate intensity of lighting necessary to illuminate the lowest shelf area. Light fixtures attached to stacks have worked well in library installations. Consider individual lighting for some of the reading tables. The loud ballast hum of fluorescent lights should be minimized through careful specification.

Some General Lighting Guidelines;

- Maximize use of day lighting and integrate into electric lighting schemes.
- Provide light colored surfaces. Light colored stack areas are critical.
- Use task lighting at tables.
- Use occupancy sensors for switching fixtures whenever possible.
- Use dimming systems that are coupled to the amount of daylight within the space.
- Increase the reflectance of walls (within contrast ratios).
- Reduce glare by correctly choosing and placing fixtures.
- Have no more than ten different lamp types at the building and site. **Library staff must approve the type and number of lamps used in the building and grounds**.

- Reduce the number of decorative and display lights.

- Provide a combination of lighting types. Include both general diffuse (indirect) and direct lighting.

- Avoid large brightness ratios. Because brightness is a function of reflectance and illumination, the brightness level is controllable through good design.

- Provide fixture locations that allow easy lamp replacement. Staff should not have to move furniture and equipment and bring in a scaffold in order to re-lamp light fixtures.

Illumination Levels

The amount of light, expressed as foot-candles, needed for a specific task is affected by a number of factors including:

- The tasks to be accomplished. Consider individual working and reading needs of the staff and customers.

- The ranges in ages of the occupants. Carefully consider whether lighting levels should be specialized for different age groups.

- The accuracy required for the tasks. Carefully consider supplemental illumination in those areas where detailed work is accomplished.

- The reflectiveness of the room.

- Colors of interior building surfaces.

- Contribution to the illumination levels from natural sources through skylights, clerestories, and vertical windows.

- Contrast ratios between adjacent surfaces and natural sources of illumination.

Lighting Levels Should Be Maintained at the Following Levels

- **Reading Areas**. 50 foot-candles average, measured horizontally at desktop, and augmented with task lighting carrels and table where appropriate.

- **Stacks**. 20 foot-candles minimum sustained uniformly at floor level.

- **Small conference or study rooms**. 30 to 40 foot-candles average measured horizontally at desktop.

- **Staff areas**. 50 foot-candles average on desks or worktables measured horizontally at desktop.

- **Large meeting or community rooms**. 40 foot-candles average with all lights on, and with separately controlled lighting for the podium or front of the room.

- **Parking lot**. 0.6 foot-candles minimum measured horizontally on pavement, to achieve a 4:1 average to minimum ratio, and with no spill light on adjacent properties. Lighting must be sensitive to neighbors, have a higher illumination level adjacent to the building and paths, and have a flexible control system that can be adjusted by staff.

Light Switching

All general public areas of the building are to be switched from panels at the circulation desk and/or workroom. No switches are to be in general public areas. The switching panel must be readily identified and contain legends to facilitate staff use. The switching panel should use multiple switches to allow variable light volume in each major area and must provide for switches and not just circuit breakers. There should not be automatic on and off switches in the restrooms.

Night lighting and emergency lighting systems should be separate from the general lighting pattern and switched separately. The night lighting should provide for illumination at all times the building is closed to the public. The system should also provide for safe staff egress with a light switch controlling exit routes adjacent to the staff exit.

Lighting fixtures in public areas should be of such type and so arranged that light levels as requested can be achieved regardless of the arrangement of shelving and/or seating.

Light Fixtures

The number of different types of lighting fixtures must be kept to a minimum and the ease of re-lamping must be a major consideration in fixture selection. Standard four-foot fluorescent tubes are most desirable.

Fixtures should not be located in areas that are difficult to access. **<u>All fixtures should be located where it is possible to re-lamp the fixture off a ten-foot ladder</u>**.

Fixtures provided must be as vandal proof as possible. Outdoor light fixtures must be "grenade proof" if not "bomb proof."

Natural Light

Windows can provide an important psychological benefit to the library as well as supplement lighting needs during the daytime. It is pleasant for readers to look out at the sky, trees, and street activity. It is also good exposure for the library if passing pedestrian or auto travelers can look in from the street at night. Areas should be maximized to take advantage of available day lighting. For example, run book stacks perpendicular to the exterior window walls. However, direct sun or glare on books and users is not desired.

Windows should bring northern daylight into the library. In general, they should be located high enough not to interfere with the arrangement of shelving and furniture. Clerestory windows and skylights are also effective although they may bring a higher risk of leakage problems over the life of the facility. Direct sunlight damages books and furniture and should be avoided, although a very small amount of sunlight in non-book storage areas can animate the library space throughout the day.

Telecommunications & Computerization[iii] (Reviewed by Karen Bracken, Riverside Public Library)

For libraries today, a high-speed flexible data network is a critical requirement for effective communication. Technology is changing so fast that what was considered cutting edge a couple of years ago might not have the capability to run today's applications. Telecommunications now includes voice, data, and video transmission of information. Building monitoring systems include fire/security, audio, environmental, and other intelligent building controls. Information from these systems is carried over a variety of systems including fiber optics, specialized copper data cabling, microwave, and radio wave.

The building project for the Riverside Main Library will have a useful life expectancy of at least fifty years. Software, hardware, and communications equipment has shorter life spans of one to five years. Continuous moves, additions, and changes may to be expected to accommodate evolving library needs and programs. A generic structured cabling system, capable of running any voice or data application foreseeable is required to enhance the useful life of the building. The cabling system will probably be required to serve many generations of hardware and software evolutions.

A structured cabling system to serve the building consists of a number of functional inter-related subsystems:

Building Entrance Facilities

Building entrance facilities provide the point at which outside cabling interfaces with the inter-building backbone cabling. The entrance facilities may be used for public network services, private networked customer services, or both. The demarcation point between carrier and customer, and over-voltage protection devices are located here. The entrance facilities consist of a termination field interfacing any outside cabling to the inter-building backbone cabling. The local telephone carrier is typically required to terminate cabling with 50 feet of building penetration, and to provide primary voltage penetration.

A locked, dedicated enclosed room is required with plywood termination field provided on two walls. The plywood should be 3/4", with dimensions of 8' high x 39" wide.

Equipment Room

An equipment room is essentially a large telecommunications closet that houses the main distribution frame, PBXs, secondary voltage protection, etc. The equipment room is often appended to the entrance facilities or a computer room to allow shared air conditioning, security, fire control, lighting, and limited access.

Following are recommendations concerning the specifications for the equipment room at the new Riverside Library:

- **Size**. Provide a room of at least 150 square feet of floor space. The rule of thumb is to provide 0.75 square feet of equipment room floor space for every 100 square feet of user workstation area.

- **Location**. The room should be located away from sources of electromagnetic interference (transformers, motors, induction heaters, theft detection systems, etc.) until interference is less than 3V/m (volt per meter-unit of electrical strength) across the frequency spectrum. The room should be an area that is not subject to floods.

- **Perimeters**. No false ceilings should be in the room. All surfaces must be treated to reduce dust, and walls and ceilings painted white or pastel to improve visibility.

- **Limited Access**. Single or double (36" x 80") lockable doors are required to limit access.

- **Sole Use**. No piping, ductwork, mechanical equipment or power cabling should be allowed to pass through the

equipment room. Unrelated storage should not be allowed in the room.

- **HVAC**. The room should be maintained 24/hrs. /day, 365 day/yr, at a temperature of 64°-75°F, 30%-55% humidity, with positive pressure.

- **Lighting**. Light fixtures should be approximately 8 feet high and maintain 50 foot-candles at 3 feet above the floor.

- **Electrical**. A minimum of two dedicated 15A, 100 VAC duplex outlets on separate circuits are required. Convenience duplex outlets should be placed at 6-foot intervals around the perimeter of the room. Emergency power should be considered and supplied if available.

Intra-Building Backbone Cabling

Within a building, the intra-building backbone pathways extend between the entrance facilities, equipment room, and telecommunications closets. In the Riverside Main library, the equipment room may be combined with the telecommunications closet. It is recommended that the backbone cabling be an optical fiber cabling system.

Telecom Closets

It is recommended that telecom closets be located within 300 feet of any workstation. However, the City's systems provider, the architect, and the Library must determine this. Recommended closet sizing is 10' x 11' for each 10,000 square-foot area served. Specifications of the room will be developed during the schematic design phase.

Power lighting, air conditioning and limited access are required. There is a minimum of three 4-inch fire-stopped backbone sleeves in the floor at the left side of a plywood termination field, which is ideally located near the door. A fire extinguisher is required in the room.

Horizontal Pathways

Horizontal pathways extend between the telecommunications closet and the work area. A variety of generic pathway options are available. Choice of pathways is left to the discretion of the designer. The most commonly employed consists of cable bundles run from the telecom closet along j-hooks suspended above a plenum ceiling, fanning out once a work zone is reached, dropping through interior walls or support columns or raceways, and terminating at an information outlet (I/O). Other options include:

- **Under-floor Duct**: Single or dual level rectangular ducts imbedded in greater than 2.5-inch thick concrete flooring.

- **Flush Duct**: Single-level rectangular duct imbedded flush in greater than 1-inch thick concrete flooring.

- **Multi-channel Raceway**: Cellular raceway ducts capable of routing Telecom and Power cabling separately in greater than 3-inch thick reinforced concrete.

- **Cellular Floor**: Preformed hollows, or steel lined cellar, are provided in concrete, with header ducts from the telecom closet arranged at right angles to the cells.

- **Trench duct**: A wide, solid tray, sometimes divided into compartments, and fitted with a flat, top with gaskets along its entire length is embedded flush with the concrete finish.

- **Access Floor**: Modular floor panels supported by pedestals, use in computer rooms and equipment rooms.

- **Conduit**: Is only used when outlet locations are permanent, device density low, and flexibility (future changes) not required. This is not the case at the Riverside Main library.

- **Perimeter Pathways**: This option includes surface, recessed, molding, and multi-channel raceways.

- **Flush combination power/telephone, data floor boxes**. A series of floor boxes strategically located by dimension from columns at all critical workstations as determined by library staff and the architect. Boxes need at least two 1" conduits (power and data), with the data conduit running back to the telecommunications closet.

Cabling

A star topology structured cabling system should be used. Each work-area telecommunications outlet must be connected to a cross-connect in a telecommunications closet. All cables from a floor or area in the building therefore run back to one central point for administration. Each telecommunication closet must be star wired back to the equipment room for the building.

One of the first choices faced in planning or developing a structured cabling system is the type of media to be used.

- **Unshielded Twisted Pair** (UTP) – 4-pair, 24-Gauge, 100 Ohm copper cable. Unshielded twisted pair cables closely resemble telephone cables but are enhanced for data communications to allow higher frequency transmissions. Category 6 cables and connection hardware

are recommended. They are rated up to 250 MHz, and are designed to handle any current copper-based application for voice, video, or data.

- **Shielded Twisted Pair** (STP-A) –2-pair, 22-gauge, 150 Ohm copper cable. Shielded Twisted pair systems provide high performance as a result of shielding. If used, Category 6 is recommended.

- **Single-mode and multi-mode optical fiber cables.** The highest performing structured cabling systems use fiber optics, and this is the choice of the Library. As the cost of the electronic devices used with fiber systems decreases, more and more fiber systems are being installed. Fiber offers many advantages over copper-based systems. There is no electromagnetic interference (EMI) or radio frequency interference (RFI). Fiber also offers a much greater bandwidth than copper cables, allowing more information to be carried on each fiber. If the budget allows, fiber should be used to the workstation. However, if fiber to all workstations is not within budget, wiring to all work stations should be at a minimum Category 6 unshielded twisted pair (UTP6) conformant with Ethernet standards and capable of providing TCP/IP protocol support.

Telecommunications Outlet

Each seat in the library shall have a minimum of four information outlet ports, and two power outlets. **Every seat in the library should be considered as a workstation and equipped with a telecommunications outlet**. At minimum a 1" dedicated conduit with a home run from each and every data outlet to the telecommunications room is required, and a ¾" conduit is required for power. Cabling outlets required are:

- **Voice**. 100 ohm UTP for Voice, T568A or T568B wiring.

- **Data**. 100-ohm UTP 4-pair, 150-ohm STP 2-pair, or 62.5/125μm fiber for data.
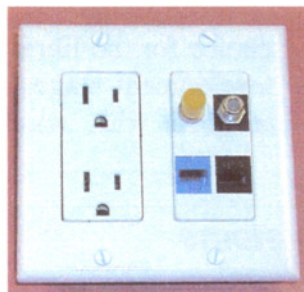
This mockup illustrates the type of box for power and data required at every seat in the library. A 1" dedicated conduit with a home run from each and every data outlet to the telecommunications room is required, and a ¾" conduit is required for power

Work Areas

The work area components extend from the telecommunications outlet to the station equipment. Work area wiring is designed to be relatively simple to interconnect so that moves, new equipment, and changes are easily managed. Work area components include:

- **Workstation Equipment**. Includes computers, data terminals, telephones, television receivers, etc.

- **Patch Cables**. Modular cords, PC adapter cables, fiber jumpers, etc.

- **Adapters**. Baluns, etc. Adapters must be external to the telecommunications outlets.

Wireless Alternative

Wireless local area networks are the future of telecommunications. Costs have decreased and reliability has increased due to better technology. UTP6

Fixed-wireless systems can be used for almost anything that a cable is used for, whether the cable is a T1 circuit, a cable television cable, an Ethernet cable or a fiber optic cable. Fixed-wireless systems are designed so that they emulate cable connections, and they use the same type of interfaces and protocols, such as T1, frame relay, Ethernet and ATM.

Fixed-wireless systems are also used for voice communications as well as for carrying television programming. But most new development in fixed-wireless systems is data-centric, such as for Internet access, or is flexible in supporting both voice and data communications. Fixed-wireless systems match cable-based systems for all-important parameters, including delay, bit-error rate (1 in 100 million or better) and throughput (1 Mbps to 155 Mbps). Consequently any application that operates over a cable should be able to operate over a fixed-wireless system.

A wireless network may be a sound choice for the library, and should be seriously considered in the design development stage. What might be considered is a wired building backbone with wireless out to the workstations.

RFID and Materials Handling Systems

Radio Frequency Identification (**RFID**) is an automatic identification method, relying on storing and remotely retrieving data using devices called RFID tags or transponders. An RFID tag is a small object that can be attached to or incorporated into books for circulation and inventory control. RFID tags contain silicon chips and antennas to enable them to receive and respond to radio-frequency queries from an RFID transceiver.

RFID (Radio Frequency IDentification) is the latest technology to be used in library theft detection systems. Unlike EM (Electro-Mechanical) and RF (Radio Frequency) systems, which have been used in libraries for decades, RFID-based systems move beyond security to become tracking systems that combine security with more efficient tracking of materials throughout the library, including easier and faster charge and discharge, inventorying, and materials handling.

RFID is a combination of radio -frequency-based technology and microchip technology. The information contained on microchips in the tags affixed to library materials is read using radio frequency technology regardless of item orientation or alignment (i.e., the technology does not require line-of-sight or a fixed plane to read tags as do traditional theft detection systems) and distance from the item is not a critical factor except in the case of extra-wide exit gates. The corridors at the building exit(s) can be as wide as four feet because the tags can be read at a distance of up to two feet by each of two parallel exit sensors. [The devices used for circulation and inventorying are usually called "readers" while the ones used at building exits are usually called "sensors."]

While librarians don't like to think of libraries as warehouses for books, there are a number of technologies developed for warehouses that can be used in libraries. Among these are automated storage/retrieval (AS/R) and return/sorting systems, collectively known in the warehousing industry as materials handling systems. When used in libraries, the former technology consists of computer-driven robotic retrieval of densely stacked storage bins, thus cutting down on the amount of space required to house a collection. The latter consists of book drops, conveyors, and sorters that cut down on manual handling of books and other library materials being returned.[iv]

Public Address System

A public address system is an essential part of the library's communication equipment. It will be used to provide a channel for emergency messages or announcements and for clearing the building of users at the close of each day.

Microphone input should be provided at the circulation desk and in administration, and speakers should be located in all parts of the library.

Doors and Windows

Doors should be equipped with a high quality closing mechanism to keep noise levels at a minimum, and allow easy exit and entry. Emergency (panic) doors need to be alarmed and monitored at the circulation desk.

Operable windows should have secure locking devices, have insect screening, and be as vandal resistant as possible.

The maintenance personnel at the City of Riverside may have specific guidelines for doors and frames, storefronts, windows, hardware, and keys and keying in City buildings. The architect must meet with representatives from the City early in the project to obtain their requirements. Involvement of the people who will be maintaining the building must continue throughout the project to insure that the equipment and materials specified are easily maintainable by personnel assigned to maintain the building.

Fire Safety & Security

Malicious vandalism, including fires, has become an increasing hazard in libraries. The building must have adequate protection. Fire detection systems, including heat and smoke detectors, should be used throughout the facility, and a method needs to be devised to prevent fire damage through the book drops. The alarm system should be connected directly to the fire department for immediate response, and have a communicator to allow monitoring by an alarm company.

A zoned overhead sprinkling system is required. Immediate freeze-drying of the collection can mitigate any water damage to books.

Fire extinguisher/hose cabinets, alarm control panels, sprinkler valve systems, and other elements which require periodic inspection and/or testing should be placed where they are easily accessible to authorized personnel without disrupting library activities or becoming an attractive nuisance to teenagers.

To reduce opportunities for breaking and entering after hours, a night lighting system should be provided as well as glass breakage sound detectors and/or infrared motion detectors. A security system to monitor unauthorized entry into the building is required.

A television monitoring system is required, with monitoring stations at the circulation desk and the guard's desk adjacent to the entry. All public areas of the building as well as outside locations should be monitored by the television system.

A book theft detection system is required in the building. Such systems at the entry/exit area have usually proven cost-effective in libraries. However, it is important to incorporate these systems into the interior design and/or architecture of the facility in order to minimize their intrusiveness on public users.

<u>Care must be taken not to locate anything metallic or magnetic close to the book theft detection system</u>. If metal studding is used in the building, wood studding should be used in the immediate vicinity of the book theft detection system. Computer terminals and any other equipment that emits an Electro-magnetic signal also should be located away from the theft detection system.

Graphics & Signage

Graphics and signage should be incorporated as an integral part of the building's design. Signage should be worked out with the layout of service areas so as to emphasize and reinforce to the public user the logical arrangement of functions and spaces within the interior. Sign requirements include:

- All signs must meet ADA requirements.

- Classification numbers at the end of stacks or in any location must identify each shelving area and should be attractive yet easily modified by staff without losing graphic integrity.

- All signage throughout the building should be able to be modified by library staff with minimum expense and effort.

- Signs should be proportional to distance from users and all signs must be sequentially positioned to facilitate self-service.

- Signs should use terminology consistently.

- Signs must be reasonably vandal proof.

- Signs must be positioned and designed to avoid injuries.

- The exterior monument sign identifying the library must be positioned so that it is easy to read when approaching the library.

- For the Riverside Main Library, signs should be both in English and Spanish.

Artwork & Display Areas

The partnerships established by the Riverside Public Library present opportunities for display of community art in the Main Library. Wall cases or freestanding museum cases with internal illumination should be provided in the library. They should have a depth of at least 18 inches and should also have an internal electrical outlet.

Displays and exhibits are best located in an area through which everyone will have to pass, and therefore where everyone will see them. The ideal location for the displays is therefore usually between the entrance and the circulation desk. The displays can make the entrance to the library one of the most inviting, cheerful, colorful and dynamic areas of the building.

One or more walls in the library should receive special treatment to serve as a gallery for art display or exhibits. In the Community Room as well as in exhibit space, walls should accommodate a picture hanging system along with a flexible lighting system to illuminate the pictures.

Wall space for community announcements, posters, etc. should also be provided. A wide range of free local publications should also be accommodated in built-in flexible storage racks in high public traffic areas within the library.

Public Art

Public Art is an important part of the City's Main library projects, and an artist must be considered as part of the design team. The following guidelines define the general scope of services for professional artists:

- The artist, as sub-consultant to the architect, shall be an equal member of the design team and integral to the overall design and development of the project, including but not limited to: the site plan, landscaping, hardscape, seating elements, fencing, sidewalks, furniture, architectural details, color, and visitor circulation.

- In consultation with the design team, the artist may also identify exterior and interior opportunities for site-specific artwork for the facility.

- The artist, as a member of the design team, shall participate in community presentations.

- Artist shall review the architects design documents at key milestones during the project.

- Artist shall prepare renderings and cost estimates of site-specific artwork, as needed.

- Artist, as a member of the design team, shall participate in design review and value engineering sessions with City staff.

- Artist shall have the opportunity to attend pre-bid and pre-construction meetings.

- Artist shall provide on-site construction installation oversight of the project.

Parking and Access

Parking needs for the library will be developed as design proceeds, and must be considered with the parking requirements for all of downtown Riverside. With public taste in vehicle usage slowly shifting away from mammoth sized vehicles, most of the parking spaces need to accommodate full sized vehicles.

Access to the parking area should be carefully worked out to maximize pedestrian and driver safety.

If possible, a passenger drop-off zone should be provided, as well as handicapped parking as specified by City code near the main entry to the building.

An oversized parking stall with ramp access to the building should be reserved for a library delivery truck, maintenance van or other City vehicle.

APPENDICES

A. Benchmarking Study
B. Recommended Expansion Spaces
C. Adjacency Drawings
D. Shelving Spacing
E. Consultant's Biography
F. Book Capacity (to be added during the final building program)

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[i] http://www.riversidedowntown.org
[ii] http://www.city-data.com/city/Riverside-California.html
and from the City of Riverside Development Department Activity Update 2003/2004
[iii] *Anixer. **EIA/TIA 569 Standard. TIA/EIA 607 Standard. TIA/EIA 568 Standard**.*
Anixter Corporation Product materials
[iv] From PLA Tech Notes

APPENDICES

Benchmarking of the Riverside PL

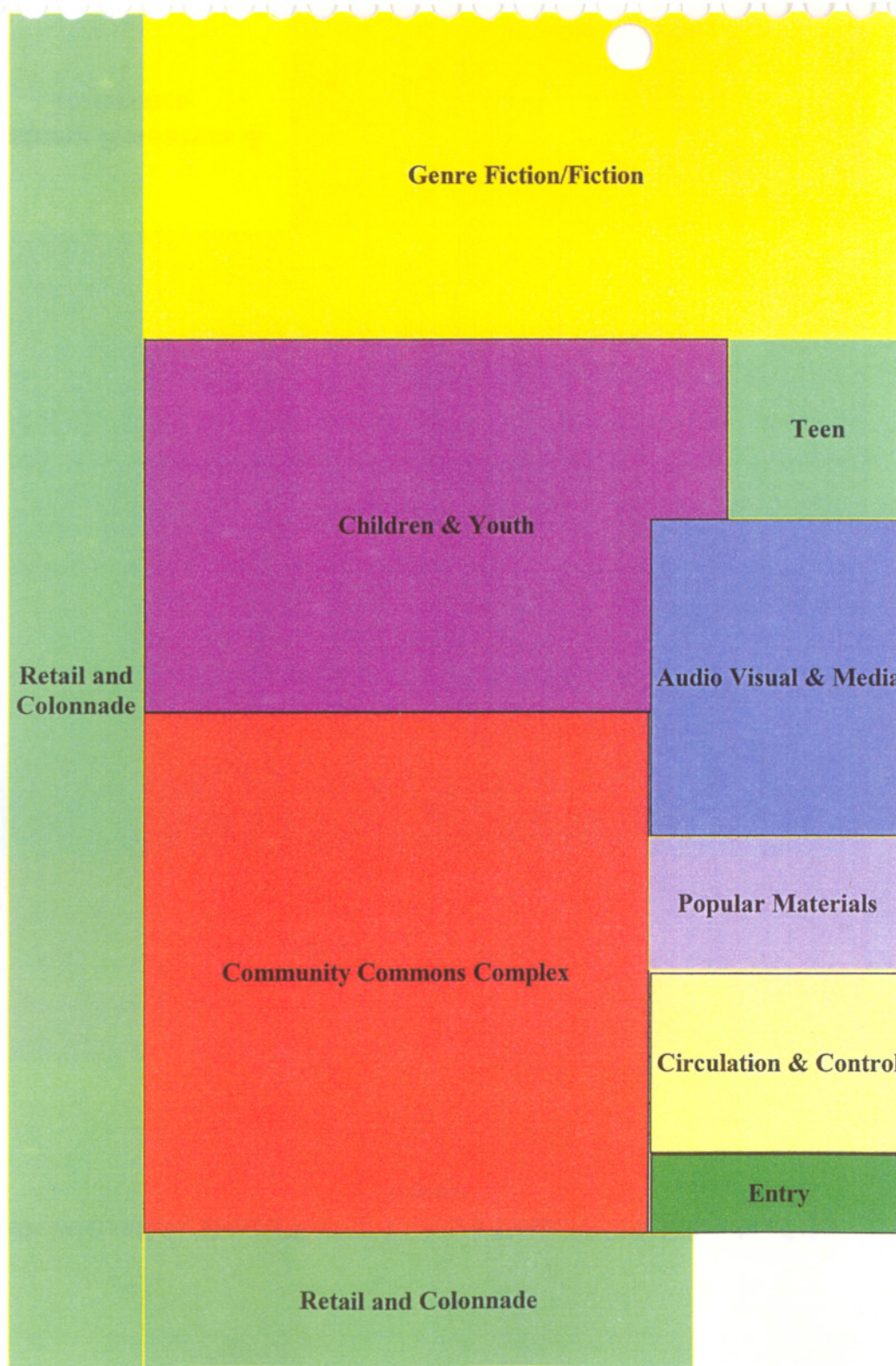| Libraries	California					Other States			
	Riverside City PL	Glendale, CA	Huntington Beach, CA	Pomona, CA	Pasadena, CA	Saint Paul, MN	Newark, NJ	Madison, WI	Mean
Population Served	274,100	205,300	197,000	153,900	144,000	287,151	272537	217,935	218,990.38
Sq. Miles	79.00	30.60	26.40	22.90	44.50	56.00	23.80	77.60	45.10
Central Library (sf)	61,420	92,000	115,000	57,000	135,000	90,353	89,636	95,000	91,926
Central Library sf per capita	0.224	0.448	0.584	0.370	0.938	0.315	0.329	0.436	0.46
Branches	7	6	4	0	9	12	10	8	7
Branches sf	53,016	66,013	10,200	0	44,346	144,410	107654	62,565	61,026
Total sf	114,436	158,013	125,200	57,000	179,346	234,763	197,290	157,565	152,952
Total sf per capita	0.417	0.770	0.636	0.370	1.245	0.818	0.724	0.723	0.71
Total Oper. Expen.	$6,546,000	$6,367,268	$4,716,475	$2,747,122	$9,900,732	$13,463,289	$15,680,953	$11,018,965	$8,805,101
Operating Expenditures per capita	$23.88	$31.01	$23.94	$17.85	$68.76	$46.89	$57.54	$50.56	$40.05
Total Staff	95.20	89.90	56.00	39.80	122.00	157.00	174.00	147.00	110
Staff/1,000 residents	2,879	2,284	3,518	3,867	1,180	1,829	1,566	1,483	2,326
Hours of Service/ week	353	220	176	54	122	157	174	505	220
Library Materials Holdings	453,654	712,134	439,552	294,178	1,096,091	1,024,917	1,635,435	909,116	820,635
Library Materials per capita	1.66	3.47	2.23	1.91	7.61	3.57	6.00	4.17	3.83
Materials per sf of library space	0.25	0.22	0.28	0.19	0.16	0.23	0.12	0.17	0.19

March, 2006   wws

Appendix B
Riverside Main Library Spaces

Recommended Space Allocation for Expansion of the Main Library

Area (gross square feet)	Proposed Square Feet
Main Level	
Entry	500
Circulation & Control	2,300
Community Commons Complex	6,000
Popular Materials	4,000
Children & Youth _Middle School_	10,300
Teen _HS_	1,400
Audio Visual	2,500
Genre Fiction/Fiction	12,000
Total 1st Floor Library Space	**39,000**
Colonnade (leased space for retail)	**8,500**
TOTAL 1ST FLOOR BUILDING MASSING	**47,500**
Upper Level	
Reference	5,000
Business Resources	3,500
Non-Fiction	16,200
Special Collections	5,000
Administration, Board, Foundation	6,000
Total Upper Level Library Space	**35,700**
Lower Level	
Government Documents	2,800
Friends of the Library Offices & Storage	4,000
Genealogy	5,000
Current & Backfile Periodicals	4,000
Electronic Resources	4,000
Technical Services	4,000
Staff Lounge	1,200
Mechanical Equipment, Work Room, etc.	5,000
Total Lower Level Library Space	**30,000**
Total Library Space	**104,700**
Total Library & Colonnade	**113,200**

Genre Fiction/Fiction

Teen

Children & Youth

Audio Visual & Media

Retail and Colonnade

Community Commons Complex

Popular Materials

Circulation & Control

Entry

Retail and Colonnade

Appendix C

Riverside Main Library
Expansion
Main Level

Administration, Board Room, Library Foundation, Friends of the Library

Appendix C

Special Collections

Riverside Main Library Expansion Upper Level

Non-Fiction

Business Resources & Reference

Reference

Government Documents

Friends of the Library Storage

Genealogy

Back-file & Current Periodicals
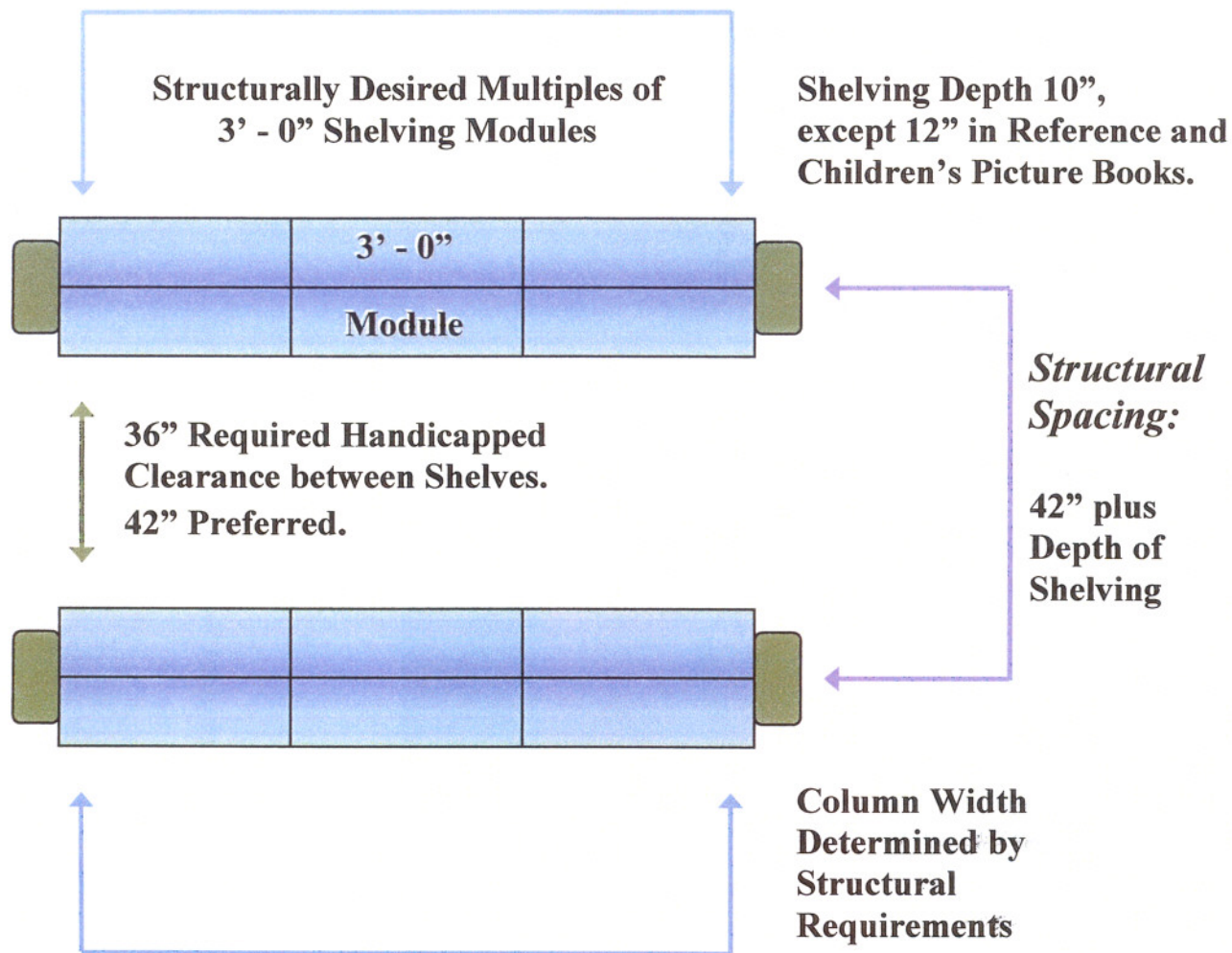
Electronic Resources

Staff Lounge

Mechanical Equipment, Work Room, Storage, etc.

Technical Services

Appendix C

**Riverside Main Library
Expansion
Lower Level**

Structural Stack Spacing

Structurally Desired Multiples of 3' - 0" Shelving Modules

Shelving Depth 10", except 12" in Reference and Children's Picture Books.

3' - 0"

Module

Structural Spacing:

42" plus Depth of Shelving

36" Required Handicapped Clearance between Shelves. 42" Preferred.

Column Width Determined by Structural Requirements

Structural Spacing:

Total Shelving Module Width plus Column Width.

Appendix E – Consultant's Biography

William Sannwald was an Assistant to the City Manager and Manager of Library Design and Development from 1997 to 2004, and was City Librarian of the San Diego Public Library from 1979 to 1997. He now works as a library consultant and is a full time faculty member in the business school at San Diego State University. The San Diego Library serves over 1,300,000 people through a Central Library, thirty-five branches. Mr. Sannwald has represented the City Manager on the City Retirement Board and in Labor Negotiations.

He has worked in public libraries in Illinois, Minnesota, Michigan, and California, and also worked in a number of marketing positions for the Xerox Corporation's University Microfilms in Ann Arbor and the Chicago Sun Times.

Mr. Sannwald received His Bachelors Degree in Economics from Beloit College in Wisconsin, a MBA degree from Loyola University in Chicago, and a MALS from Dominican University in Illinois. He received a H.W. Wilson scholarship to attend Dominican University, where he was elected President of his class and selected for membership in Beta Phi Mu.

He was President of the 4,000 member Library Administration and Management Association, and has chaired the American Library Association's Architecture for Public Libraries Section. In 2003, he received the LAMA Leadership Award for his contribution to the Association. Sannwald was an elected representative to the Users Council of OCLC, an organization of 45,000 libraries in 89 countries dedicated to providing access to the world's information and reducing costs. He has presented papers at national and international conferences, and is the author of a number of books and articles on library architecture and management. He was a jury member and chaired the joint ALA/AIA awards ceremony in 1995 and 1997, and was a member of the first jury for the ALA/IIAD Design Awards in 2006. The San Diego Chapter of the American Institute of Architects presented him with their highest award, the Irving Gill Award, for his contributions to library architecture, and he received the San Diego design community's Ruocco Award for his contributions to urban architecture. During his career, he has been involved in the construction of over 60 library buildings as either a consultant or owner's representative.

Mr. Sannwald teaches a variety of courses in the marketing and management departments at San Diego State University, and was selected by the Associated Business Students as the outstanding marketing Professor. He also has received an award from the President of SDSU as the Outstanding Professor in the Business School. He also was a visiting professor at the Graduate Library School Dominican University in Chicago.